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Annual Compilation and Analysis of Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1969

By G. R. Dempster, Jr. and B. C. Massey

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-WATER RESOURCES DIVISION

Texas District

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

ANNUAL COMPILATION AND ANALYSIS OF HYDROLOGIC DATA
FOR URBAN STUDIES IN THE FORT WORTH, TEXAS
METROPOLITAN AREA
1969

By

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ANNUAL COMPILATION AND ANALYSIS OF HYDROLOGIC DATA
FOR URBAN STUDIES IN THE FORT WORTH, TEXAS
METROPOLITAN AREA
1969

By

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INTRODUCTION

Hydrologic investigations of urban areas in Texas were begun by the U.S. Geological Survey in 1954. These studies are now in progress in Austin, Houston, Dallas, Dallas County, Fort Worth, San Antonio, and Bryan.

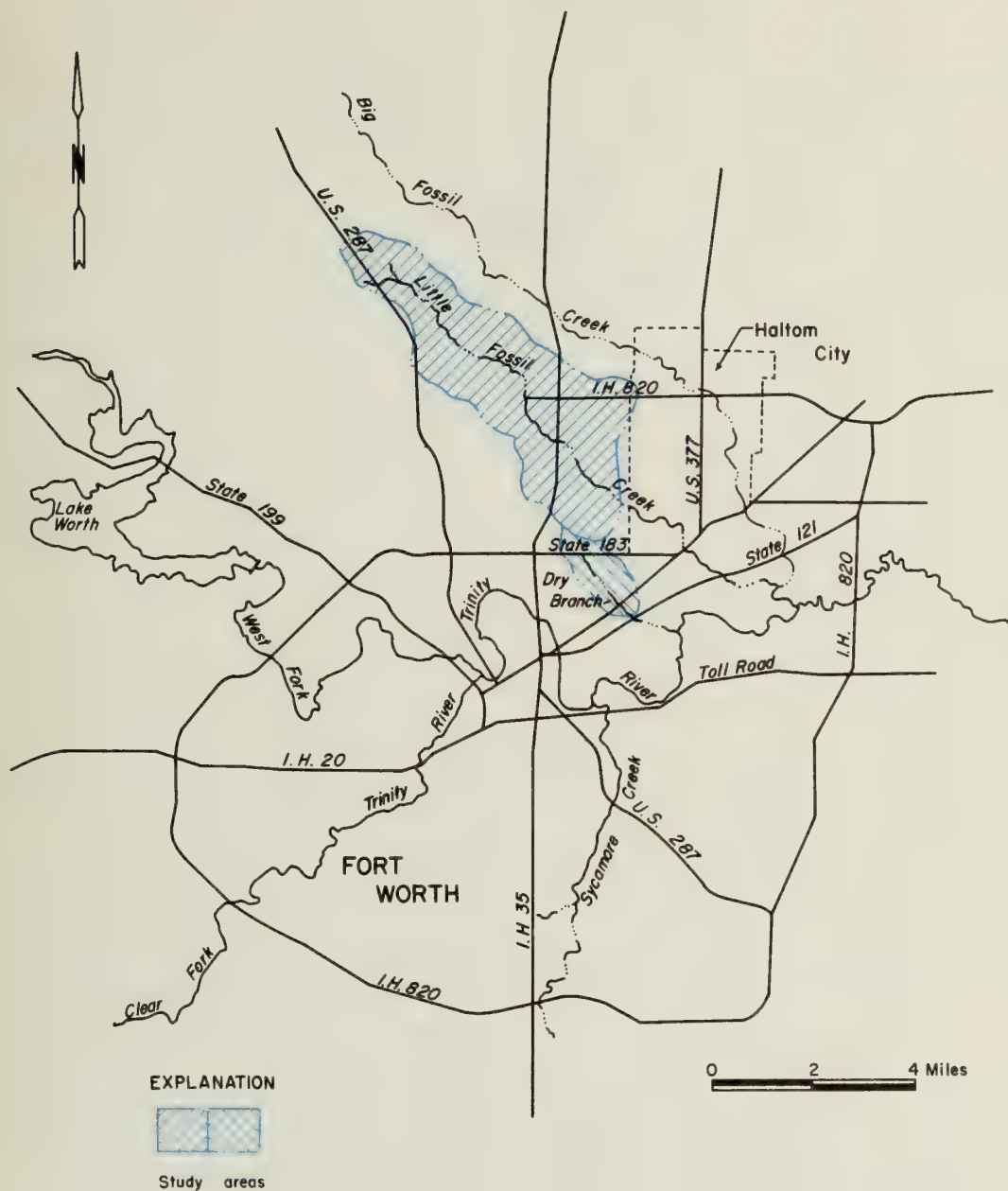
In October 1968, the Geological Survey began a program of investigations on several small streams in Fort Worth that were designed to evaluate the hydrologic factors affecting floods in the Fort Worth metropolitan area. The objectives of this program are:

1. To determine, on the basis of historical data and hydrologic analyses, the magnitude and frequency of floods.
2. To document and define the areal extent of floods of greater than ordinary magnitude.
3. To determine the effect of urban development on flood peaks and volume.

This report, the first in a series of reports to be published annually, is primarily applicable to objectives 2 and 3. The report presents the basic hydrologic data collected in two study areas during the 1969 water year (October 1, 1968, to September 30, 1969). The two basins within the study area are the Dry Branch and Little Fossil Creek (fig. 1).

WATERSHED FEATURES

Dry Branch (fig. 2) is located in the Oakhurst section of northeast Fort Worth. The headwaters originate 1.3 miles northwest of the Fort Worth Refinery. The stream flows southeasterly in an open channel upstream from the refinery, and then through a multiplate pipe-arch beneath the refinery. The stream again becomes an open



Base from General Highway
map of Texas

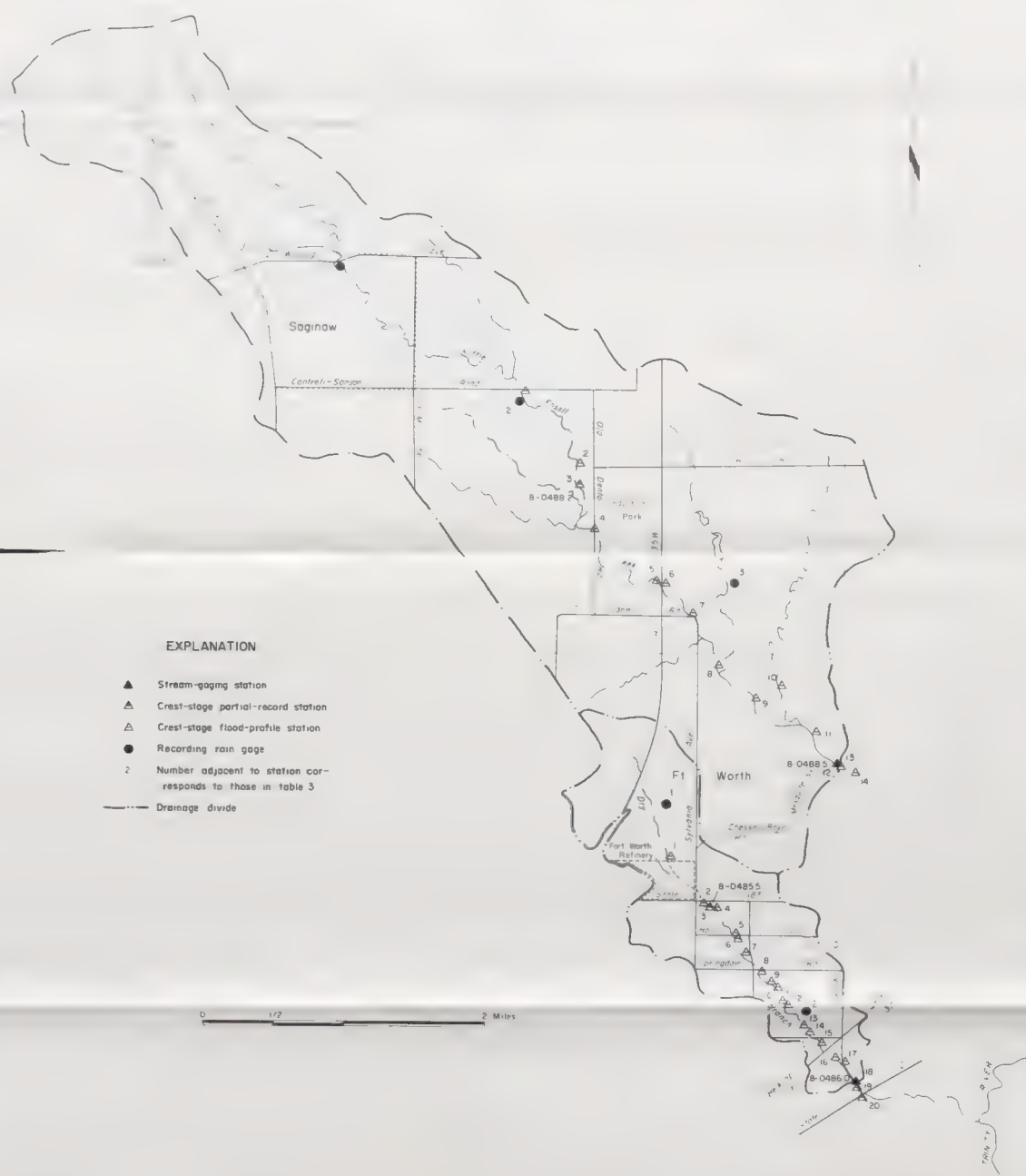
FIGURE 1.- Locations of Dry Branch and Little Fossil Creek study areas

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Base map from U.S. Geological Survey
topographic quadrangles

FIGURE 2.- Locations of hydrologic-instrument installations in the Dry Branch and Little Fossil Creek study areas



Base map from U.S. Geological Survey
topographic quadrangles

FIGURE 2.—Locations of hydrologic-instrument installations in the Dry Branch and Little Fossil Creek study areas

channel downstream from the refinery and continues through a residential section southeastward for 1.1 miles to the West Fork Trinity River. The creek decreases in altitude from approximately 635 feet at the headwaters above the Fort Worth Refinery to 538.5 feet at Fain Street, a distance of 3.6 miles.

Little Fossil Creek (fig. 2) is located north of downtown Fort Worth in north-central Tarrant County. The headwaters originate near Saginaw, and the stream flows southeasterly through Saginaw, through the Greater Southwest Corporation Industrial Park, and into the northeast part of Fort Worth. The stream continues its southeasterly course from Fort Worth through Haltom City to Big Fossil Creek, and thence to the West Fork Trinity River. The creek decreases in altitude from approximately 810 feet at the headwaters near Saginaw to 550 feet at Mesquite Street in northeast Fort Worth, a distance of 9.3 miles.

HYDROLOGIC INSTRUMENTS

Dry Branch Study Area

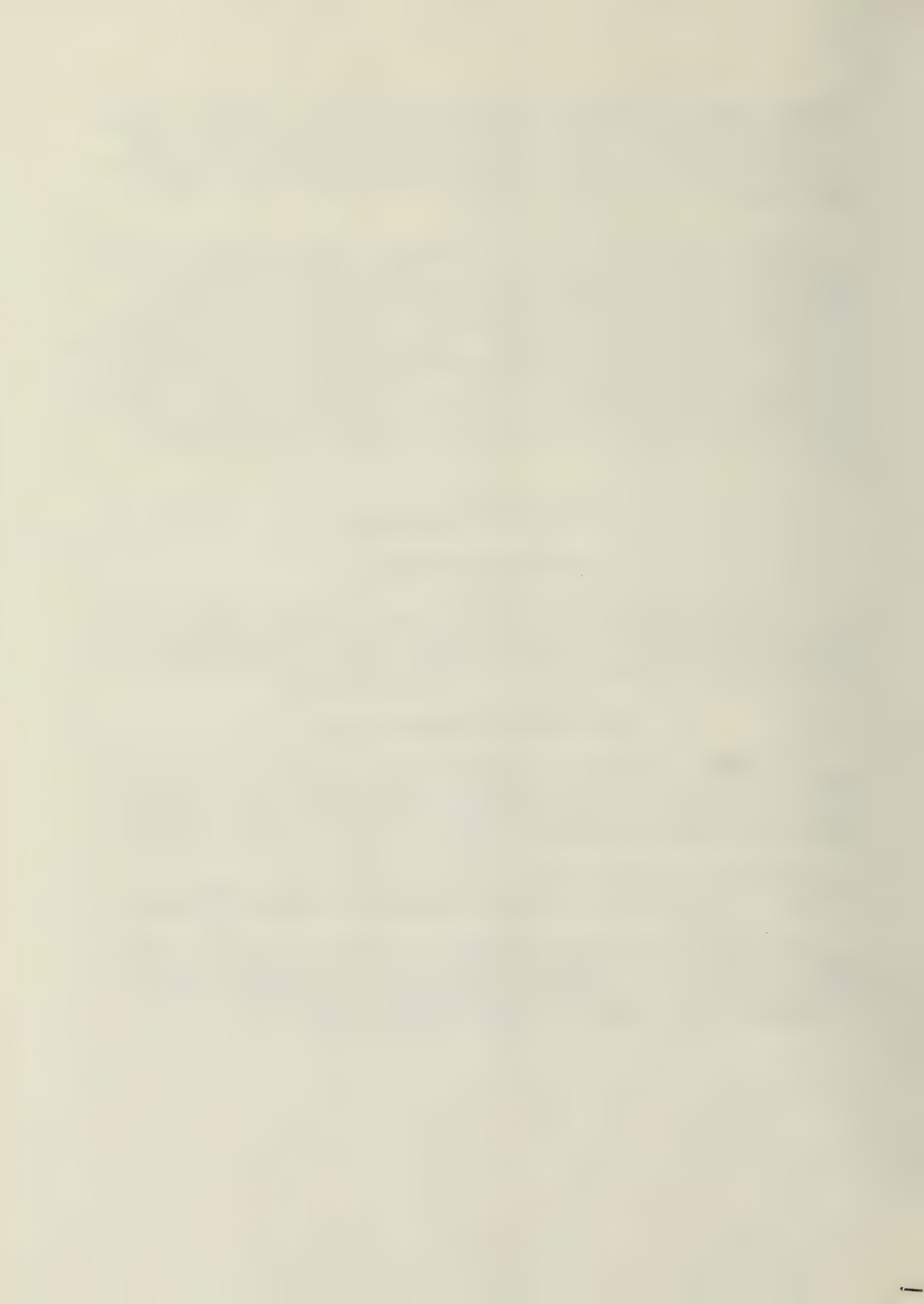
Instruments to collect rainfall, runoff data, and flood-profile data in the Dry Branch study area consist of two recording rain gages, one continuous-record streamflow station, one crest-stage partial-record streamflow station, and 18 flood-profile gages.

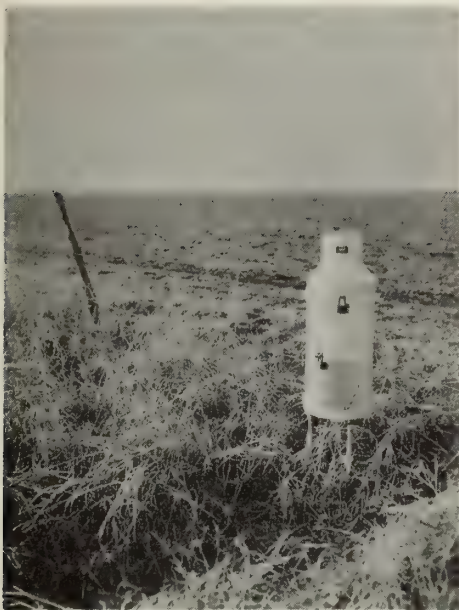
Little Fossil Creek Study Area

Instruments to collect rainfall, runoff data, and flood-profile data in the Little Fossil Creek study area consist of three recording rain gages, one continuous-record streamflow station, one crest-stage partial-record streamflow station, and 12 flood-profile gages.

Altitudes at recording stations and flood-profile gages are referred to mean sea level, or may be converted to mean sea level.

Locations of hydrologic instruments in the two study areas are shown on figure 2. Photographs of typical hydrologic instruments are shown on figure 3. Pertinent individual station information is included in the compilation and analysis of data.





Recording rain gage.



Crest-stage gage.



Partial-record station recorder.



Steel shelter to house bubble gage equipment.

Figure 3.--Typical hydrologic-instrument installations.

SUMMARY OF DATA FOR THE 1969 WATER YEAR

During the 1969 water year, noteworthy storms occurred on April 16-17, May 6-7, and September 22, 1969, in the Dry Branch basin; and March 14-15, April 16-17, and May 6-7, 1969, in the Little Fossil Creek basin.

A storm is defined as a period of rainfall separated by at least 6 hours from other rainfall. Summaries of storm rainfall-runoff data for these individual selected storms at crest-stage partial-record stations and streamflow stations are given in tables 1 and 2, respectively. Computations and curves for each storm are shown in the compilation and analysis of data.

Other data, including storm and monthly rainfall and daily and monthly runoff for the 1969 water year, are included in the compilation and analysis of data. In addition, flood-profile data for the storms of April 16-17 and May 6-7 are listed in table 3.

Average monthly rainfall and runoff in the two study basins for the period February to September 1969 are summarized in the following table:

Month	Station			
	Little Fossil Creek at Mesquite St.		Dry Branch at Fain St.	
	Average rainfall (inches)	Runoff (inches)	Average rainfall (inches)	Runoff (inches)
February	1.90	0.42	2.10	0.73
March	3.70	1.42	3.61	1.12
April	3.70	1.18	4.04	1.40
May	5.23	2.49	6.31	2.45
June	1.85	.12	1.61	.56
July	.74	.01	.63	.35
August	4.21	.10	3.28	.82
September	4.91	.23	5.50	1.15

Note: Rain gages installed during January and February 1969. See REMARKS paragraph of station descriptions in compilation and analysis of data for discussion of regulation or diversions.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 1.--Storm rainfall-runoff data, at crest-stage partial-record stations, water year 1969.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
8-0485.5. Dry Branch at Blandin Street, Fort Worth, Tex. (Drainage area, 1.08 sq mi)								
Apr. 16-17, 1969	4.0	1.85	1.13	1.59	1.73	-	-	217
May 6-7, 1969	*6.3	*2.45	.71	.92	1.67	-	-	194
Sept. 22, 1969	5.2	2.44	.74	.98	1.48	-	-	139
8-0488.2. Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. (Drainage area, 5.64 sq mi)								
Apr. 16-17, 1969	4.2	1.78	1.00	1.38	1.52	-	-	675
May 6-7, 1969	*5.7	*1.89	.45	.76	1.19	-	-	715

* Intense part of storm shown only.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 2.--Storm rainfall-runoff data, at streamflow stations,
water year 1969.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
8-0486. Dry Branch at Fain Street, Fort Worth, Tex. (Drainage area, 2.15 sq mi)								
Apr. 16-17, 1969	4.2	1.85	0.78	1.56	1.74	0.76	0.41	250
May 6-7, 1969	26.2	3.10	.56	.87	1.43	1.40	.45	292
Sept. 22, 1969	5.2	2.57	.58	.85	1.39	.48	.19	162
8-0488.5. Little Fossil Creek at Mesquite Street, Fort Worth, Tex. (Drainage area, 12.3 sq mi)								
Mar. 14-15, 1969	33.0	1.59	-	-	0.22	0.69	0.43	528
Apr. 16-17, 1969	4.2	1.52	0.79	1.06	1.30	.70	.46	1,000
May 6-7, 1969	22.0	2.62	.55	.96	1.38	1.68	.64	1,530

Table 3.--Peak elevations at flood-profile partial-record stations for the period April to September 1969.

Map No.	Station No.	Station name and location	Drainage area (sq mi)	Distance above mouth (miles)	FLOOD ELEVATIONS		
					Apr. 16-17, 1969	May 6, 1969	
<u>Dry Branch watershed</u>							
1	8-0485.5(+)	Dry Branch at Texas and Pacific RR spur-rb track		*3.41	598.40	597.71	
2		Dry Branch at Grace St.-dslbH		*2.86	588.45	587.84	
3		Dry Branch at Blandin St.-24' uslb1/	1.08	*2.82	587.15	586.95	
4		Dry Branch at Blandin St.-dsrb		*2.80	587.41	587.16	
5		Dry Branch at Hollis St.-60' usrb, tree		*2.52	586.95	586.50	
6		Dry Branch at Hollis St.-10' dslb, tree		*2.49	584.01	582.81	
7		Dry Branch at Selma St.-120' uslb, tree		*2.38	584.18	583.46	
8		Dry Branch at Springdale-dsrb		*2.18	571.15	572.36	
9		Dry Branch at Bonnie Brae-80' uslb, tree		*2.07	570.28	572.00	
10		Dry Branch between Bonnie Brae & Aster Ct.-100' usrb, tree		*1.98	567.96	567.96	
11		Dry Branch at Carnation St.-20' usrb		*1.89	566.15	567.49	
12		Dry Branch at Carnation-100' dslb, tree		*1.85	565.29	566.43	
13		Dry Branch at Robinwood-150' usrb, tree		*1.65	564.74	565.97	
14		Dry Branch between Robinwood and Yucca-150' uslb, tree		*1.56	559.06	558.80	
15	8-0486(+)	Dry Branch between Yucca and Belknap-rb, tree		*1.46	554.70	555.28	
16		Dry Branch at Beach St.-uslbW		*1.29	545.14	545.52	
17		Dry Branch at Beach St.-dsrbH		*1.23	542.75	542.82	
18		Dry Branch at Fain St.-usrb2/	2.15	*1.08	542.23	542.09	
19		Dry Branch at Fain St.-dsrbW		*1.06	540.66	540.12	
20		Dry Branch at Hwy. 121-uslbW		*.99	540.45	539.43	
<u>Little Fossil Creek watershed</u>							
1	8-0488.2(+)	Little Fossil Creek at Cantrell-Samson Rd.-dslbW		8.42	639.22	639.06	
2		Little Fossil Creek at Int. 820-usrbW		7.73	618.27	617.29	
3		Little Fossil Creek at Int. 820-dsrbW3/	5.64	7.55	612.47	612.55	
4		Little Fossil Creek at Old Denton Road-dsrb		7.14	603.87	603.96	
5		Little Fossil Creek at Int. 35-W-usrb		6.35	593.01	593.16	
6		Little Fossil Creek at Int. 35-W-dslb		6.26	591.97	592.19	
7		Little Fossil Creek at Watauga (Sylvania Ave.)-uslb, tree		5.93	586.29	586.49	
8		Little Fossil Creek midway between Watauga and St. Louis Southwestern RR.-rb		5.50	577.51	<577.56	
9		Little Fossil Creek at St. Louis Southwestern RR.-dsrb		5.12	570.40	571.27	
10		Little Fossil Creek trib. at St. Louis Southwestern RR.-dsrb		-	572.3	574.90	
11		Little Fossil Creek at Texas & Pacific RR.-30' dslb		4.54	560.68	561.66	
12		8-0488.5(+)	Little Fossil Creek at Mesquite St.-rb4/	12.3	4.24	555.03	556.92
13			Little Fossil Creek at Beach St.-usrb		4.20	<556.24	556.74
14			Little Fossil Creek at Beach St.-500' dsrb		4.11	552.28	553.33
1/	Station established Feb. 13, 1969.			<	Less than amount shown.		
2/	Station established Oct. 24, 1968.			H	Headwall.		
3/	Station established Apr. 3, 1969.			W	Wingwall.		
4/	Station established Oct. 17, 1968.			ds	Downstream.		
*	Distances based on consultant's report by Knowlton-Ratliff-English, 1967.			us	Upstream.		
+	Continuous-recording station.			rb	Right bank.		
#	Partial-record station.			lb	Left bank.		

NOTE: Flood-profile partial-record stations established during February, March, and April 1969. Elevations for storms other than those above were below most crest-stage gages.

COMPI LATION AND ANALYSIS OF DATA

TRINITY RIVER BASIN

8-0486. Dry Branch at Fain Street, Fort Worth, Tex.

LOCATION.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft upstream from culverts on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles upstream from mouth, and 2.9 miles northeast of County Courthouse.

DRAINAGE AREA.--2.13 sq mi.

PERIOD OF RECORD.--October 1968 to September 1969.

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 292 cfs May 6 (gage height, 4.58 ft); maximum gage height, 4.72 ft Apr. 16 (backwater from debris); minimum discharge, 0.08 cfs Sept. 7-9.

Maximum stage since April 1964, 9.0 ft in April 1966 at upstream side of Fain street culvert, from information by local resident (discharge not determined).

REMARKS.--Records fair. Low flow sustained by effluent from commercial establishments and industry above station. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.38	1.7	.61	.38	.38	.23	.39	1.0	.38	.22	.38
2	.40	8.1	.61	.61	.38	3.4	.31	.76	.61	.22	.22	.38
3	.40	1.4	.61	.61	.38	.64	.22	.84	3.4	.22	.22	19
4	.40	.38	.61	.61	.38	.40	.38	1.7	.61	.22	2.8	.38
5	.40	.38	.61	.61	.38	3.5	.22	20	.38	.22	4.6	.19
6	.40	.38	.38	.61	1.0	1.0	.16	44	.61	.22	.61	.13
7	.40	.38	.38	.61	.61	1.4	.16	37	.38	.22	.61	.08
8	.40	4.4	.38	1.0	.61	.81	.27	2.8	.38	.38	.79	.08
9	7.0	1.3	.38	.61	.50	.38	.26	1.4	.61	.38	.38	.08
10	1.0	1.0	.61	.61	.34	.31	.22	.95	.38	.38	.38	1.2
11	.60	.61	1.0	.61	.74	.38	.47	.47	1.6	.38	.22	.44
12	.40	.61	1.0	.61	.90	.59	12	.38	1.9	.38	.52	.13
13	.40	.61	1.0	.61	1.1	.71	2.5	.38	1.3	.38	1.1	.13
14	.40	1.0	1.0	.61	7.5	1.1	.72	3.7	1.3	.38	1.1	.13
15	.40	4.1	1.0	1.2	1.6	25	.61	1.4	1.0	.38	12	.13
16	.40	1.3	.61	1.3	.52	2.4	24	.61	.61	.38	1.3	.13
17	.40	1.0	.61	1.3	1.1	7.1	20	14	1.3	.61	1.3	.13
18	.40	.61	1.6	1.0	.61	3.4	1.0	1.4	1.6	1.3	1.4	.17
19	.50	.61	.61	1.0	.69	1.2	.70	.61	1.4	1.3	.61	.22
20	.60	.61	1.0	.61	3.2	.66	.49	.61	.38	1.1	.61	.23
21	.60	.38	1.0	.61	15	.40	.76	.61	1.0	3.8	.38	.54
22	1.0	.38	.61	.61	1.6	.43	.78	.61	1.0	1.3	.38	27
23	.60	.61	.38	.61	.87	6.8	.90	.48	6.2	.41	.38	13
24	.38	.61	.22	.61	.38	.49	1.2	.38	1.3	1.0	.38	.54
25	.38	.38	.13	.61	.48	.22	1.3	.38	.38	1.0	4.0	.38
26	.38	13	.13	.61	.38	.22	1.3	.38	.38	1.0	1.6	.32
27	.38	5.2	1.5	.61	.38	.22	8.6	.61	.38	.61	7.1	.13
28	.38	2.6	.38	1.0	.38	.22	.54	1.0	.38	.38	.61	.13
29	.38	.61	.38	1.3	-----	.22	.38	1.0	.38	.38	.38	.24
30	.38	5.3	.38	12	-----	.70	.38	1.3	.38	.22	.38	.38
31	.38	-----	.61	.61	-----	.22	-----	1.3	-----	.22	.61	-----
TOTAL	20.94	58.23	21.42	34.52	42.39	64.90	81.06	141.45	32.53	19.95	47.19	66.40
MEAN	.68	1.94	.69	1.11	1.51	2.09	2.70	4.56	1.08	.64	1.52	2.21
MAX	7.0	13	1.7	12	15	25	24	44	6.2	3.8	12	27
MIN	.38	.38	.13	.61	.34	.22	.16	.38	.38	.22	.22	.08
CFSM	.31	.90	.32	.52	.70	.97	1.26	2.12	.50	.30	.71	1.03
IN.	.36	1.01	.37	.60	.73	1.12	1.40	2.45	.56	.35	.82	1.15
AC-FT	42	116	42	68	84	129	161	281	65	40	94	132

CAL YR 1968	TOTAL	—	MEAN	—	MAX	—	MIN	—	CFSM	—	IN	—	AC-FT	—
WTR YR 1969	TOTAL	630.98	MEAN	1.73	MAX	44	MIN	.08	CFSM	.80	IN	10.91	AC-FT	1,250

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-16	2330	4.72	250	9- 3	about	3.07	128
5- 6	2130	4.58	292		0700		
				9-22	1300	3.38	162

TRINITY RIVER BASIN

8-0488.5. Little Fossil Creek at Mesquite Street, Fort Worth, Tex.

LOCATION.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles northeast of County Courthouse, and approximately 4.3 miles upstream from Big Fossil Creek.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--October 1968 to September 1969.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,530 cfs May 6 (gage height, 8.30 ft); no flow July 16-20, July 28 to Aug. 3, Aug. 14.

Maximum stage since 1955, 10.5 ft (at Alta Vista Road) in September 1962, from information by local resident (discharge not determined). Flood of Mar. 20, 1968, reached a stage of 8.7 ft, from floodmarks at upstream side of Alta Vista Road bridge (discharge not determined).

REMARKS.--Records good. Flow slightly regulated by several small floodwater-retarding structures on tributaries above station. Low flow sustained at times by effluent from industrial park 2.6 miles upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.32	7.7	.72	2.8	1.8	3.0	2.3	1.5	.14	0	.09
2	.10	5.2	2.7	.77	2.1	5.7	2.7	2.0	1.2	.17	0	.06
3	.10	3.4	1.6	.74	1.5	7.6	2.5	2.0	2.7	.17	0	15
4	.10	.90	1.2	.59	1.3	3.9	2.4	2.1	2.3	.17	.24	2.2
5	.10	.64	1.1	.70	1.3	8.6	2.2	73	1.4	.12	5.9	.75
6	.10	.44	1.1	.71	1.3	7.7	1.9	207	1.3	.12	.46	.35
7	.10	.44	1.1	.58	1.2	4.3	1.8	347	1.2	.12	.26	.30
8	.10	2.0	1.1	.64	1.1	4.2	2.0	47	1.2	.10	.14	.21
9	6.0	1.3	.83	.53	.97	2.6	1.8	15	.97	.12	.05	.32
10	2.0	.81	.93	.44	.98	2.2	1.8	8.1	1.1	.05	.05	.34
11	.80	.64	.95	.68	.94	1.9	1.5	5.6	.97	.03	.08	.94
12	.50	.64	1.1	.73	.93	1.8	24	4.6	.96	.03	.05	.45
13	.30	.57	.91	.64	.92	1.7	29	4.0	1.2	.03	.01	.34
14	.20	.57	.77	.56	6.9	1.8	7.3	3.9	2.8	.03	0	.21
15	.16	2.0	.77	.71	8.8	187	4.4	3.8	1.5	.01	6.4	.12
16	.14	1.8	.69	1.3	2.5	39	50	3.2	1.1	0	.98	.08
17	.13	.90	.78	.86	2.0	36	181	43	1.0	0	.28	.07
18	.13	.64	1.2	.69	1.7	61	10	11	1.3	0	.19	.19
19	.26	.57	.82	.69	1.4	12	5.8	6.0	1.5	0	.12	.08
20	.38	.57	.69	.76	5.6	6.3	4.3	5.2	.97	0	.06	.10
21	.44	.50	.99	.78	53	4.9	3.9	4.1	.76	1.3	.07	.54
22	1.2	.50	.90	.74	17	4.2	3.0	3.4	.66	.57	1.9	19
23	1.1	.57	.72	.73	6.0	27	2.8	3.4	3.4	.25	2.5	27
24	.38	.50	.72	.72	4.4	10	2.7	3.1	3.3	.14	.99	2.6
25	.13	.44	.74	.73	4.0	5.3	2.6	2.5	1.1	.07	.70	1.1
26	.10	11	.71	.69	3.3	4.4	2.6	2.2	.68	.05	1.1	.69
27	.07	14	1.4	.70	2.5	3.8	22	2.0	.63	.02	5.7	.52
28	.05	12	1.1	.78	2.0	3.2	6.0	2.0	.39	0	1.7	.46
29	1.4	2.8	.81	1.5	-----	3.0	3.6	1.9	.33	0	1.1	.41
30	.64	5.3	.81	86	-----	3.2	2.8	2.0	.18	0	.34	.38
31	.44	-----	.78	5.2	-----	3.2	-----	1.7	-----	0	.20	-----
TOTAL	17.75	71.96	37.72	112.61	138.44	469.3	391.6	824.1	39.60	3.81	31.57	74.90
MEAN	.57	2.40	1.22	3.63	4.95	15.1	13.1	26.6	1.32	.12	1.02	2.50
MAX	6.0	14	7.7	86	53	187	181	347	3.4	1.3	6.4	27
MIN	.05	.32	.69	.44	.92	1.7	1.5	1.7	.18	0	0	.06
CFSM	.05	.20	.10	.30	.40	1.23	1.06	2.16	.11	.01	.08	.20
IN.	.05	.22	.11	.34	.42	1.42	1.18	2.49	.12	.01	.10	.23
AC-FT	35	143	75	223	275	931	777	1,630	79	7.6	63	149

CAL YR 1968	TOTAL	MEAN	MAX	MIN	CFSM	IN	AC-FT
WTR YR 1969	TOTAL 2,213.56	MEAN 6.06	MAX 347	MIN 0	CFSM .49	IN 6.69	AC-FT 4,390

PEAK DISCHARGE (BASE, 290 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-30	0730	4.20	293	4-17	0100	6.41	1,000
3-15	1430	5.10	528	5- 6	2145	8.30	1,530

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations in Fort Worth during water year 1969

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
8-0485.5	Dry Branch at Blandin Street, Fort Worth, Tex. <u>a/</u>	Lat 32°47'19", long 97°18'22", Tarrant County, at culvert on Blandin Street in north Fort Worth, 2.82 miles upstream from mouth.	1.08	1969	4-16-69	587.15	9217
8-0488.2	Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. <u>a/</u>	Lat 32°50'22", long 97°19'22", Tarrant County, at culvert on South access road to Interstate Highway 820, 5.7 miles north of courthouse, Fort Worth, and 7.55 miles upstream from mouth.	5.64	1969	5- 6-69	612.55	h715

a/ Equipped with stage recorder.

g Period February to September 1969; probably maximum for the year.

h Period April to September 1969; probably maximum for the year.

1969 WATER YEAR

CONTINUED

RAINFALL DATA SUMMARY

STUDY AREA LITTLE FOSSIL CREEK BASIN AT
FORT WORTH, TEXAS1969 WATER YEAR

RAIN GAGE

Date of storm	1-LF	x.34	2-LF	x.25	3-LF	x.41	WMR	WERE INSTALLED	DATE OF STORM	1-LF	x.34	2-LF	x.25	3-LF	x.41	WMR
1969									JANUARY 20, 1969.							
									FEBRUARY 3, 1969.							
Jan. 21	0		-	0.02			0.01		May 15, 1969	0.17	.0578	0.04	.0100	0.19	.0779	
29	.06		-	.08			.07		16-17	1.06	.3604	.81	.2025	.96	.3936	0.15
29-30	1.82		-	1.86			1.84		17-18	.07	.0238	.10	.0250	.09	.0369	.96
Jan. Total	-		-	-			-		May Total	-	-	-	-	-	-	.09
Feb. 13	0.03	.0102	0.04	.0100	0.06	.0246	0.04		June 3	0.33	.1122	0.40	.1000	0.43	.1763	5.23
13-14	.33	.1122	.30	.0750	.35	.1435	.33		12	(.15	.0510	.11	.0275	.04	.0164	0.39
14	.42	.1428	.42	.1050	.41	.1681	.42		14	(.37	.1258	.60	.1500	.23	.0943	.09
15	0	.0000	0	.0000	.01	.0041	0		18	(.21	.0714	.33	.0825	.16	.0656	.37
17	.03	.0102	.03	.0075	.05	.0205	.04		23	.81	.2754	.80	.2000	.75	.3075	.22
19	.05	.0170	.05	.0125	.04	.0164	.05		June Total	-	-	-	-	-	-	.78
20	.30	.1020	.31	.0775	.34	.1394	.32		July 21	0.93	.3162	0.57	.1425	0.69	.2829	1.85
21	.53	.1802	.72	.1800	.82	.3362	.70		July Total	-	-	-	-	-	-	0.74
Feb. Total	-		-	-	-	-	1.90			-	-	-	-	-	-	.74
Mar. 2	0.41	.1394	0.43	.1075	0.50	.2050	0.45		Aug. 4-5	1.06	.3604	2.08	.5200	1.30	.5330	1.41
5	.27	.0918	.31	.0775	.33	.1353	.30		15	.56	.1904	1.02	.2550	1.45	.5945	1.04
7	.15	.0510	.16	.0400	.13	.0533	.14		22	.47	.1598	.69	.1725	(.20	.0820	.41
14-15	1.54	.5236	1.79	.4475	1.52	.6232	1.59		23	.03	.0102	.43	.1075	(.05	.0205	.14
17	.66	.2244	.57	.1425	.45	.1845	.55		25	.36	.1224	.34	.0850	.27	.1107	.32
23	.59	.2006	.62	.1550	.54	.2214	.58		27	.64	.2176	.68	.1700	.64	.2624	.65
30	.10	.0340	.09	.0225	.08	.0328	.09		28	.25	.0850	.37	.0925	.15	.0615	.24
Mar. Total	-		-	-	-	-	3.70		Aug. Total	-	-	-	-	-	-	4.21
Apr. 12-13	1.33	.4522	1.40	.3500	1.20	.4920	1.29		Sept 2	0.01	.0034	0.01	.0025	0	.0000	0.01
16-17	1.88	.6392	1.45	.3625	1.26	.5166	1.52		3	1.53	.5202	2.12	.5300	1.27	.5207	1.57
20	0	.0000	0	.0000	0	.0000	0		7	.02	.0068	.01	.0025	.14	.0574	.07
26	.08	.0272	.06	.0150	.04	.0164	.06		8	.18	.0612	.06	.0150	.10	.0410	.12
27	.80	.2720	.89	.2225	.81	.3321	.83		9	.02	.0068	.06	.0150	.05	.0205	.04
Apr. Total	-		-	-	-	-	3.70		10	.37	.1258	.35	.0875	.26	.1066	.32
May 3	0.05	.0170	0.07	.0175	0.04	.0164	0.05		11	0	.0000	0	.0000	.01	.0041	0
4-5	1.41	.4794	1.18	.2950	1.19	.4879	1.26		20	.08	.0272	.16	.0400	(.13	.0533	.12
6-7	2.01	.6834	2.37	.5925	2.64	.0824	2.36		22	1.87	.6358	1.43	.3575	1.74	.7134	1.71
7	.27	.0918	.25	.0625	.25	.1025	.26		23	1.09	.3706	.83	.2075	.89	.3649	.94
8	.09	.0306	.04	.0100	.08	.0328	.07		24	0	.0000	0	.0000	.02	.0082	.01
14	0	.0000	.02	.0050	.07	.0287	.03		Sept Total	-	-	-	-	-	-	4.91
									1969 WATER YEAR TOTAL	-	-	-	-	-	-	--

CONTINUED

RUNOFF COMPUTATIONS

Station Little Fossil Creek at Mesquite St., Fort Worth, Tex
Period of Record March 14-16, 1969 Drainage Area 12.3 mi²

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
March 14, 1969							
0000	2.29	0	1.6	8.5	.00020	.0017	.0017
1700	2.29		1.6	10.0	.00020	.0020	.0037
2000	2.32		2.2	2.5	.00028	.0007	.0044
2200	2.32		2.2	1.5	.00028	.0004	.0048
2300	2.34		2.6	1.0	.00033	.0003	.0051
2400	2.39	0	3.9	0.5	.00049	.0002	.0053
			42.95/24				
			1.8				
March 15, 1969							
0000	2.39	0	3.9	1.0	.00049	.0005	.0058
0200	2.44		5.4	1.5	.00068	.0010	.0068
0300	2.68		19	2.5	.0024	.0060	.0128
0700	2.88		36	3.0	.0045	.0135	.0263
0900	3.38		114	1.5	.0144	.0216	.0479
1000	3.56		147	1.0	.0185	.0185	.0664
1100	3.99		240	1.0	.0302	.0302	.0966
1200	4.45		356	1.0	.0449	.0449	.1415
1300	4.74		434	1.0	.0547	.0547	.1962
1400	5.04		514	.75	.0648	.0486	.2448
1430	5.10		528	.50	.0665	.0332	.2780
1500	5.06		514	.75	.0648	.0486	.3266
1600	4.84		460	1.5	.0580	.0870	.4136
1800	4.17		286	2.0	.0360	.0720	.4856
2000	3.68		170	2.0	.0214	.0428	.5284
2200	3.39		116	2.0	.0146	.0292	.5576
2400	3.27	0	95	1.0	.0120	.0120	.5696
			4479.5/24				
			187				

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff		
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.	
			March 16, 1969					
0000	3.27	0	95	2.0	.0120	.0240	.5936	
0400	3.06		60	4.0	.0076	.0304	.6240	
0800	2.92		41	4.5	.0052	.0234	.6474	
1300	2.82		30	5.0	.0038	.0190	.6664	
1800	2.73		22	5.5	.0028	.0154	.6818	
2400	2.65	0	16	3.0	.0020	.0060	.6878	
			933.50/24					
			39					
Total runoff = 452 ac-ft.								

Computed by GRD Date 11-28-69 Checked by BCM Date 1-7-70
JDB Date 1-7-70

Add 548.62 ft to G.Ht. to obtain m.s.l.

Comp. by: GKD

March 14-15, 1969

March 14-15, 1969

[illegible]

HYDROGRAPH and MASS CURVES
for
STORM OF MARCH 14-15, 1969
at
LITTLE FOSSIL CREEK AT MESQUITE
STREET, FORT WORTH, TEXAS
Drainage Area 12.3 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = ac-ft.

400

300

200

100

0

ACCUMULATED RAINFALL AND RUNOFF, IN INCHES

2.0

1.0

0

DISCHARGE IN CUBIC FEET PER SECOND

0900

1200

1500

1800

2100

2400

0300

0600

MARCH 14, 1969

MARCH 15, 1969

Accumulated rainfall

Discharge

Accumulated runoff

600

500

400

300

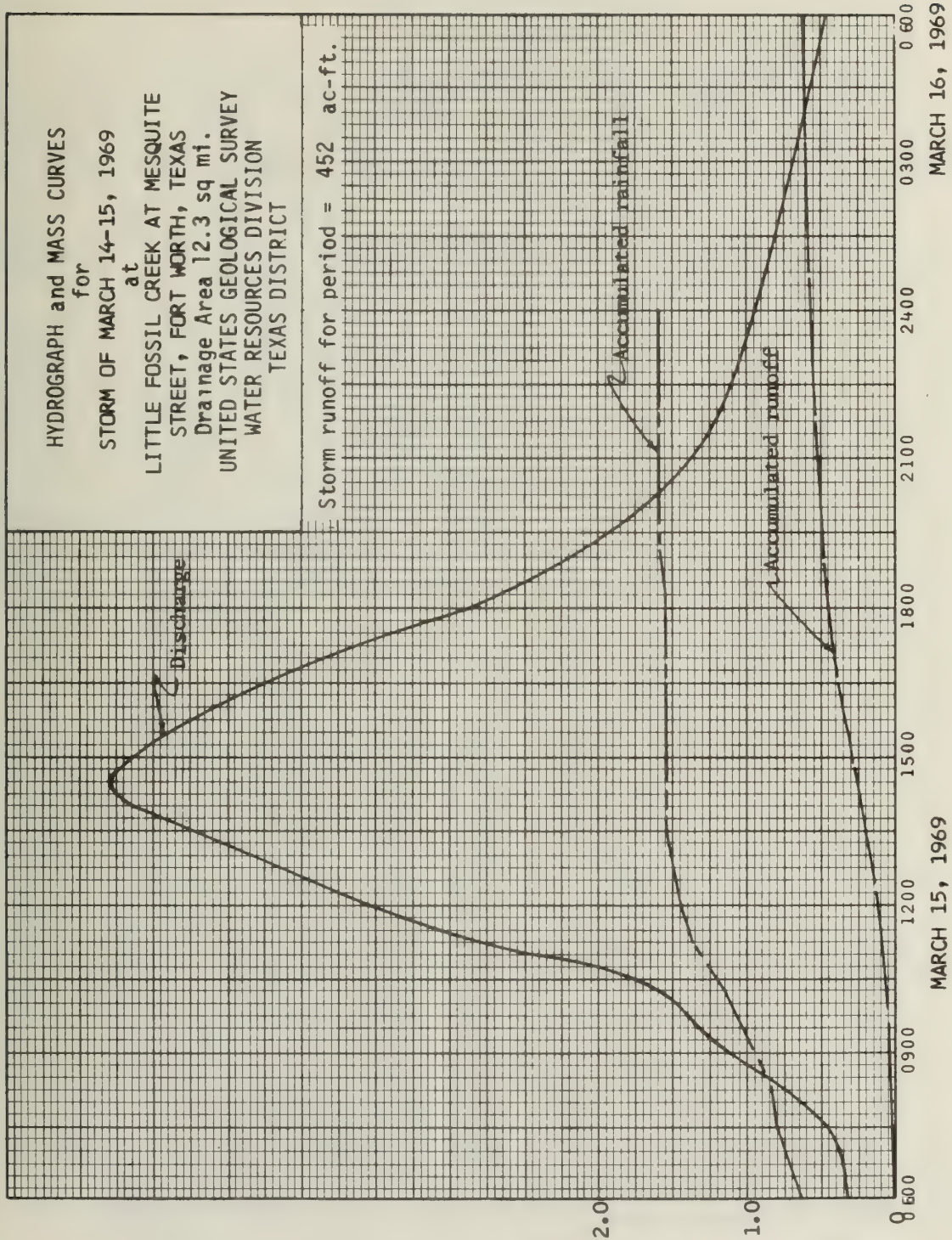
200

100

0

DISCHARGE IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL AND RUNOFF, IN INCHES



GEOLOGICAL SURVEY-AUSTIN DISTRICT

RUNOFF COMPUTATIONS

Station Dry Branch at Fain St. at Fort Worth, Tex.
Period of Record April 16-17, 1969 Drainage Area 2.15 mi²

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
Apr. 16, 1969							
0000	1.09	0	.3	10.5	.0027	.0028	.0028
2100	1.09		.3	10.625	.0029	.0029	.0057
2115	1.35	0	6.2	.25	.00448	.0011	.0068
2130	2.60	*.08 81			.0584	.0146	.0214
2145	4.18	*.13 228			.1644	.0411	.0625
2200	3.77	*.18 182			.1312	.0328	.0953
2215	4.25	*.22 228			.1644	.0411	.1364
2230	4.45	*.28 240	.25	.1730	.0432		.1796
2245	4.51	*.34 240	.50	.1730	.0865		.2661
PK. 2330	4.72	*.46 250	.625	.1802	.1127		.3788
2400	4.61	*.56 228	.25	.1644	.0411		.4199
			581.099 / 24				
			24				
Apr. 17, 1969							
0000	4.61	*.56 228	.25	.1644	.0411		.4610
0030	4.47	*.67 202	.375	.1456	.0546		.5156
0045	4.58	*.67 212	.25	.1529	.0382		.5538
0100	3.94	*.57 157	.375	.1132	.0424		.5962
0130	2.93	*.41 81	.75	.0584	.0438		.6400
0230	2.41	*.32 47	1.0	.0339	.0339		.6739
0330	2.06	*.26 28	1.0	.0202	.0202		.6941
0430	1.87	*.23 18	1.25	.0130	.0162		.7103
0600	1.65	*.19 10	2.25	.00721	.0162		.7265
0900	1.46	*.16 4.8	4.25	.00346	.0147		.7412
1430	1.32	*.13 2.4	3.0	.00173	.0052		.7464
1500	1.18	0	2.2	1.75	.00159	.0028	.7492
1800	1.15		1.7	4.5	.00123	.0055	.7547
2400	1.13	0	1.4	3.0	.00101	.0030	.7577
			468.675 / 24				

20

Computed by GRD Date

[illegible]

Computed GRD Date _____
 Checked JDB Date 1-8-70
BCM 1-8-70

Add 537.51 ft. to G.Ht. to obtain MSL.

*Trash and debris on culvert; removed between 1430 and 1500 hrs. on April 17.

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY, SURFACE WATER BRANCH
AUSTIN DISTRICT

WEIGHTED-PRECIPI TATION RECORD

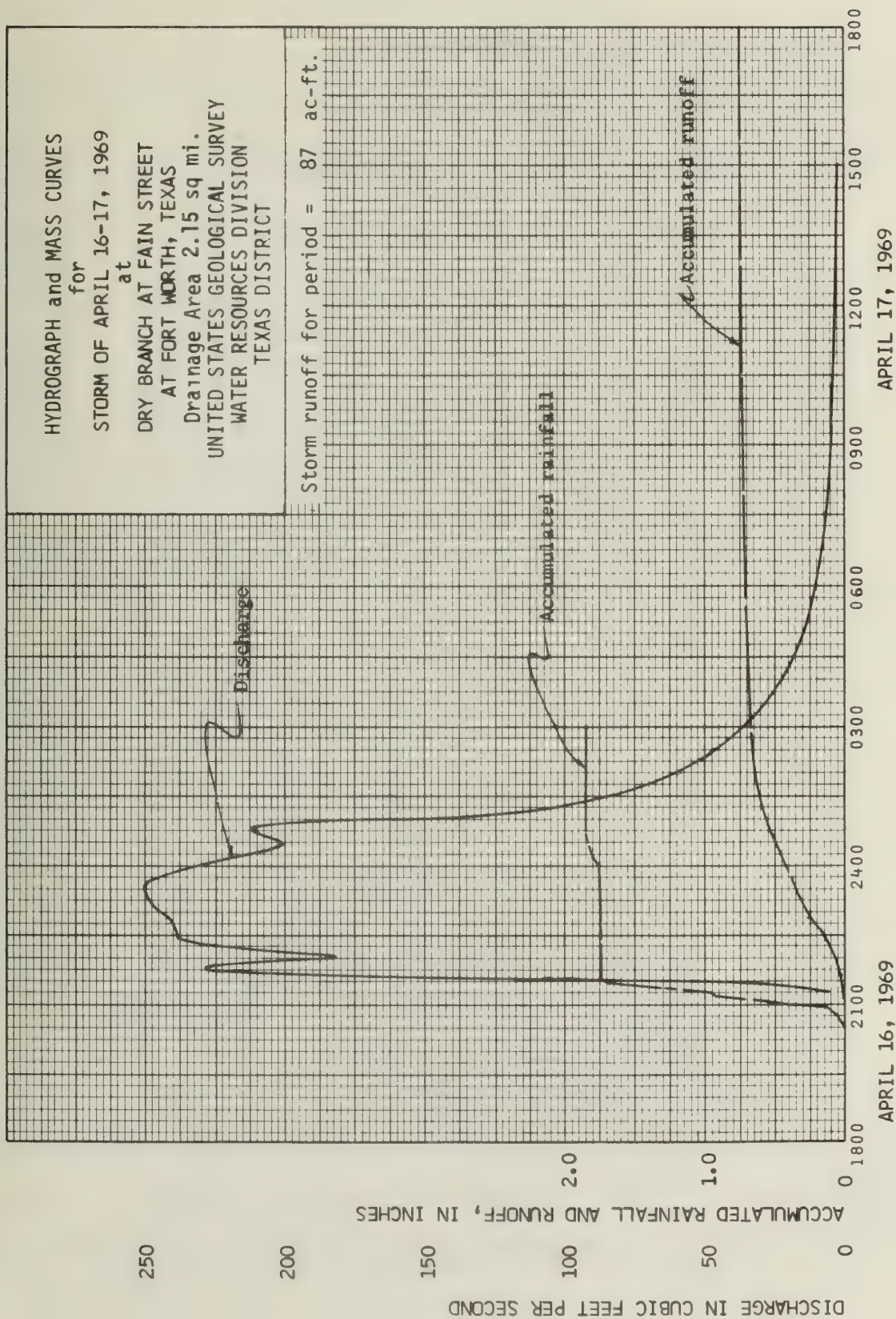
Area: Dry Branch at Fain St. at Fort Worth, Tex. Date of storm April 16-17, 1969

[illegible]
$$W.P. = \text{sum of Precipitation} \times \text{Weight Factor}$$

$$W.P. = \frac{\text{sum of Precipitation} \times \text{Weight Factor}}{\text{Total Recording Gages}} \quad \text{Weighted Precipitation} = 1.00$$

HYDROGRAPH and MASS CURVES
for
STORM OF APRIL 16-17, 1969
at
DRY BRANCH AT FAIN STREET
AT FORT WORTH, TEXAS
Drainage Area 2.15 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 87 ac-ft.



RUNOFF COMPUTATIONS

Station Little Fossil Creek at Mesquite St. of Fort Worth, Tex.
Period of Record April 16-17, 1969 Drainage Area 12.3 mi²

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
April 16, 1969							
0000	2.37	0	3.44	0.00043	.0017	.0017	
0800	2.37		3.45	.00043	.0022	.0039	
1000	2.35		2.86	.00035	.0023	.0062	
2115	2.35		2.85	.00035	.0020	.0082	
2130	3.11		68	.25	.0086	.0104	
2145	3.42		122	1	.0154	.0142	
2200	4.10		268	.25	.0338	.0226	
2215	4.55		380	.375	.0479	.0406	
2245	5.30		585	.50	.0737	.0774	
2315	5.12		528	.625	.0665	.1190	
2400	5.52	0	650	.375	.0819	.1497	
<u>1,188.50 / 24</u>							
50							
April 17, 1969							
0000	5.52	0	650	.50	.0819	.1907	
0100 ^{PK}	6.41		1100	1.0	.1260	.3167	
0200	5.70		720	1.0	.0907	.4074	
0300	4.95		488	1.0	.0615	.4689	
0400	4.38		343	1.5	.0432	.5337	
0600	3.86		209	2.0	.0263	.5863	
0800	3.44		125	2.5	.0158	.6258	
1100	3.14		73	3.5	.0092	.6580	
1500	2.90		38	4.0	.0048	.6772	
1900	2.76		25	4.5	.0032	.6916	
2400	2.65	0	16	2.5	.0020	.6966	
<u>4338.0 / 24</u>							
181							
Total runoff = 458 ac-ft.							

[illegible]

Computed by GRD Date 5-15-69 checked by JDB Date 1-7-70

Add 548.62 ft to G. Ht. to obtain MSL.

Comp. by: _____
Date: _____
Check by: _____
Date: _____

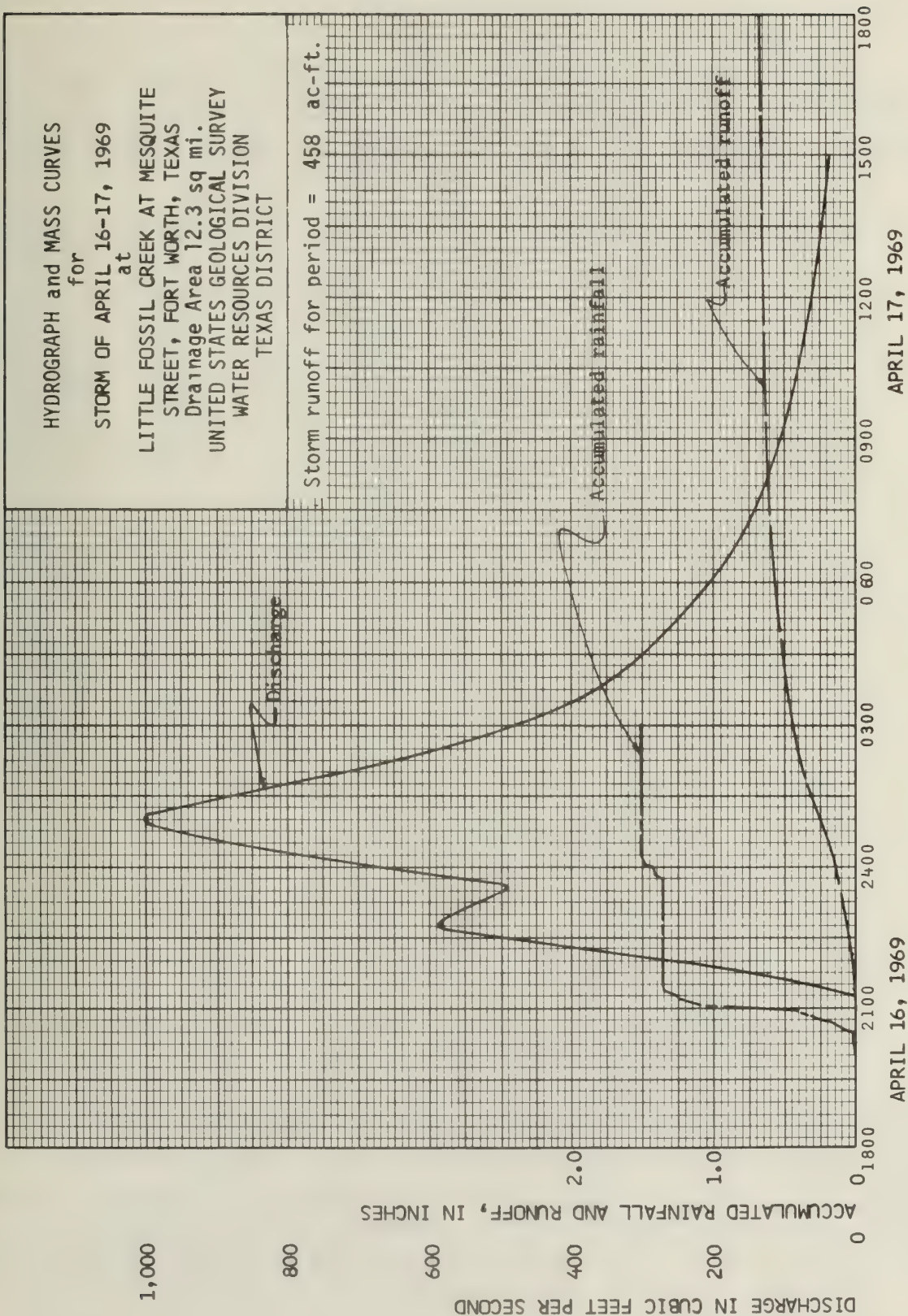
WEIGHTED-PRECIPIATION RECORD

Location: Little Fossil Creek at Mesquite St., Fort Worth, Tex. Date of storm April 16-17, 1969

[illegible]
$$WWR = \frac{\text{Sum of Precipitation} \times \text{Weight Factor}}{\text{Total Recording Gages Weighted Precipitation}}$$

HYDROGRAPH and MASS CURVES
for
STORM OF APRIL 16-17, 1969
at
LITTLE FOSSIL CREEK AT MESQUITE
STREET, FORT WORTH, TEXAS
Drainage Area 12.3 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 458 ac-ft.



GEOLOGICAL SURVEY-TEXAS DISTRICT

RUNOFF COMPUTATIONS

P-R sta.

Station Dry Branch at Glandin Street, Fort Worth, Tex.
Period of Record April 16, 1969 Drainage Area 1.08 sq. mi.

Period of Record April 16, 1969

Drainage Area 1.08 sq. mi

[illegible][illegible]

Computed by GRD Date 10-13-69 Checked by JDB Date 1-7-70

* Recorder operated above 585.09 ft.

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY - WATER RESOURCES DIVISION
TEXAS DISTRICT

WEIGHTED-PRECIPITATION RECORD

[illegible]

HYDROGRAPH and MASS CURVE
for
STORM OF APRIL 16-17, 1969
at
DRY BRANCH AT BLANDING STREET,
FORT WORTH, TEXAS
Drainage Area 1.08 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

Discharge

Accumulated rainfall

ACCUMULATED RAINFALL, IN INCHES

DISCHARGE IN CUBIC FEET PER SECOND

APRIL 16, 1969

APRIL 17, 1969

GEOLOGICAL SURVEY-TEXAS DISTRICT

RUNOFF COMPUTATIONS

Partial-record station

Station Little Fossil Creek at Interstate 820 at Fort Worth, Tex.
Period of Record April 16-17, 1969 Drainage Area 5.64 sq. mi.

Drainage Area 5.64 sq. mi.

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
April 16							
2110	610.78	0	99				
15	611.13		182				
20	611.43		269				
25	611.45		275				
30	611.32		236				
35	611.09		172				
40	610.96		140				
2145	610.90		125				
2200	610.85		114				
05	610.87		118				
10	610.94		135				
15	611.06		165				
20	611.23		209				
25	611.14		185				
30	611.41		263				
40	611.48		284				
2250	611.68		353				
2300	611.98		462				
15	612.19		546				
30	612.31		595				
2340	612.43		655				
2400	612.47		675				
April 17							
0005	612.38		630				
0030	612.32		600				
0045	612.18		542				
0115	612.00		470				
0135	611.80		395				
0215	611.54	0	304				
(cont.)							

[illegible]

Computed by GRD Date _____ Checked by BCM Date 1-7-70

* Recorder operated above 610.78 ft.

WEIGHTED-PRECIPITATION RECORD

NAME: Little Fossil Creek at Interstate Highway 820 Fort Worth Tex. Date of storm April 16-17, 1969

Weight Factor		0.76		0.24		Accumulated Precipitation in Inches for Recording Gages		Accumulated Weighted Precipitation (Rec. Gages x M)	
Rein. Gage	Weight Factor	Rein. Gage	Weight Factor	Rein. Gage	Weight Factor	Rein. Gage	Weight Factor	Rein. Gage	Weight Factor
April 16 1969	0	0	0	0	0	0	0	0	0
2005	0.01	0.076	0.01	0.024	0.01	0.024	0.01	0.024	0.01
2020	0.01	0.076	0.02	0.048	0.02	0.048	0.02	0.048	0.02
2030	0.13	0.988	0.03	0.072	0.03	0.072	0.03	0.072	0.03
2035	0.17	1.292	0.04	0.096	0.04	0.096	0.04	0.096	0.04
2040	0.35	2.660	0.19	0.456	0.19	0.456	0.19	0.456	0.19
2045	0.50	3.800	0.32	0.768	0.32	0.768	0.32	0.768	0.32
2050	0.57	4.332	0.36	0.864	0.36	0.864	0.36	0.864	0.36
2055	0.76	5.976	0.42	1.008	0.42	1.008	0.42	1.008	0.42
2100	1.13	8.588	0.97	2.328	0.97	2.328	0.97	2.328	0.97
2105	1.61	12.236	1.23	2.952	1.23	2.952	1.23	2.952	1.23
2110	1.63	12.388	1.27	3.048	1.27	3.048	1.27	3.048	1.27
2115	1.64	12.464	1.30	3.120	1.30	3.120	1.30	3.120	1.30
2120	1.65	12.540	1.30	3.120	1.30	3.120	1.30	3.120	1.30
2130	1.65	12.540	1.30	3.120	1.30	3.120	1.30	3.120	1.30
2340	1.66	12.616	1.30	3.120	1.30	3.120	1.30	3.120	1.30
2345	1.73	13.148	1.32	3.168	1.32	3.168	1.32	3.168	1.32
2350	1.75	13.300	1.35	3.240	1.35	3.240	1.35	3.240	1.35
2355	1.77	13.452	1.35	3.240	1.35	3.240	1.35	3.240	1.35
2400	1.78	13.528	1.37	3.288	1.37	3.288	1.37	3.288	1.37
April 17 1969	0	0	0	0	0	0	0	0	0
0005	1.87	14.212	1.44	3.456	1.44	3.456	1.44	3.456	1.44
0010	1.88	14.288	1.45	3.480	1.45	3.480	1.45	3.480	1.45
0015	1.88	14.288	1.45	3.480	1.45	3.480	1.45	3.480	1.45
0030	1.88	14.288	1.45	3.480	1.45	3.480	1.45	3.480	1.45
0300	1.88	14.288	1.45	3.480	1.45	3.480	1.45	3.480	1.45
Total		Total		Total		Total		Total	
Sum of Precipitation x Weight Factor		Sum of Precipitation x Weight Factor		Sum of Precipitation x Weight Factor		Sum of Precipitation x Weight Factor		Sum of Precipitation x Weight Factor	
K =		K =		K =		K =		K =	
WMB =		WMB =		WMB =		WMB =		WMB =	

HYDROGRAPH and MASS CURVE for

STORM OF APRIL 16-17, 1969

at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

800

600

400

200

0

DISCHARGE IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

2.0

1.0

0

Discharge

Accumulated rainfall

1200

0600

0300

2400

2100

1800

APR. 16, 1969

APR. 17, 1969

RUNOFF COMPUTATIONS

Station Dry Branch at Fain St. at Fort Worth, Tex.
Period of Record May 6-7, 1969 Drainage Area 2.15 mi.²

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
May 6, 1969							
0000	1.20	0	2.6	2.0	.00187	.0037	.0037
0400	1.20		2.6	4.0	.00187	.0075	.0112
0800	1.15		1.7	7.625	.00123	.0094	.0206
1915	1.14		1.6	5.75	.00115	.0066	.0272
1930	1.20		2.6	.25	.00187	.00047	.0277
1945	2.45		75		.0541	.0135	.0412
2000	2.49		78		.0562	.0141	.0553
2015	3.52		172		.1240	.0310	.0863
2030	3.82		202		.1456	.0364	.1227
2045	4.15		240	.25	.1730	.0432	.1659
2100	4.38		268	.375	.1932	.0724	.2383
^{PK} 2130	4.58		292	.50	.2105	.1052	.3435
2200	4.27		250		.1802	.0901	.4336
2230	4.37		262		.1889	.0944	.5280
2300	4.52		280		.2019	.1010	.6290
2330	4.39		268	.50	.1932	.0966	.7256
2400	4.10	0	234	.25	.1687	.0422	.7678
			1065.162/24				
			44				
May 7, 1969							
0000	4.10	0	234	.125	.1687	.0211	.7889
0015	3.92		212	.25	.1529	.0382	.8271
0030	4.08		234		.1687	.0422	.8693
0045	3.73		197	.25	.1420	.0355	.9048
0100	3.15		138	.375	.0995	.0373	.9421
0130	2.78		104	.50	.0750	.0375	.9796
0200	2.64		92	.75	.0663	.0497	1.0293
0300	2.18	0	54	1.0	.0389	.0389	1.0682
(Cont.)							

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
			May 7, 1969 (cont.)				
0400	1.95	0	37	1.5	.0267	.0401	1.1083
0600	1.76		25	1.25	.0180	.0225	1.1308
0630	1.82		29	.75	.0209	.0157	1.1465
0730	2.05		44	1.25	.0317	.0376	1.1861
0900	1.75		24	1.5	.0173	.0260	1.2121
1030	1.57		15	2.25	.0108	.0243	1.2364
1330	1.41		8.4	1.75	.00606	.0106	1.2470
1400	1.59		16	.50	.0115	.0058	1.2528
1430	2.28		61		.0440	.0220	1.2748
1500	2.33		65		.0469	.0234	1.2982
1530	2.07		45	.50	.0324	.0162	1.3144
1600	1.92		35	.75	.0252	.0189	1.3333
1700	1.76		25	2.0	.0180	.0360	1.3693
2000	1.47		11	2.5	.00793	.0198	1.3891
2200	1.38		7.2	2.0	.00519	.0104	1.3995
2400	1.33	0	56	1.0	.00404	.0040	1.4035
			881.95	124			
			37				

Computed by GRD Date Computed GRD Date
checked JDB & BCM Date 1-8-70

Add 537.51 ft to G. Ht. to obtain msl.

WEIGHTED-PRECIPIATION RECORD

Ann Dry Branch at Fair St. at Fort Worth, Tex

[illegible]

300

250

200

150

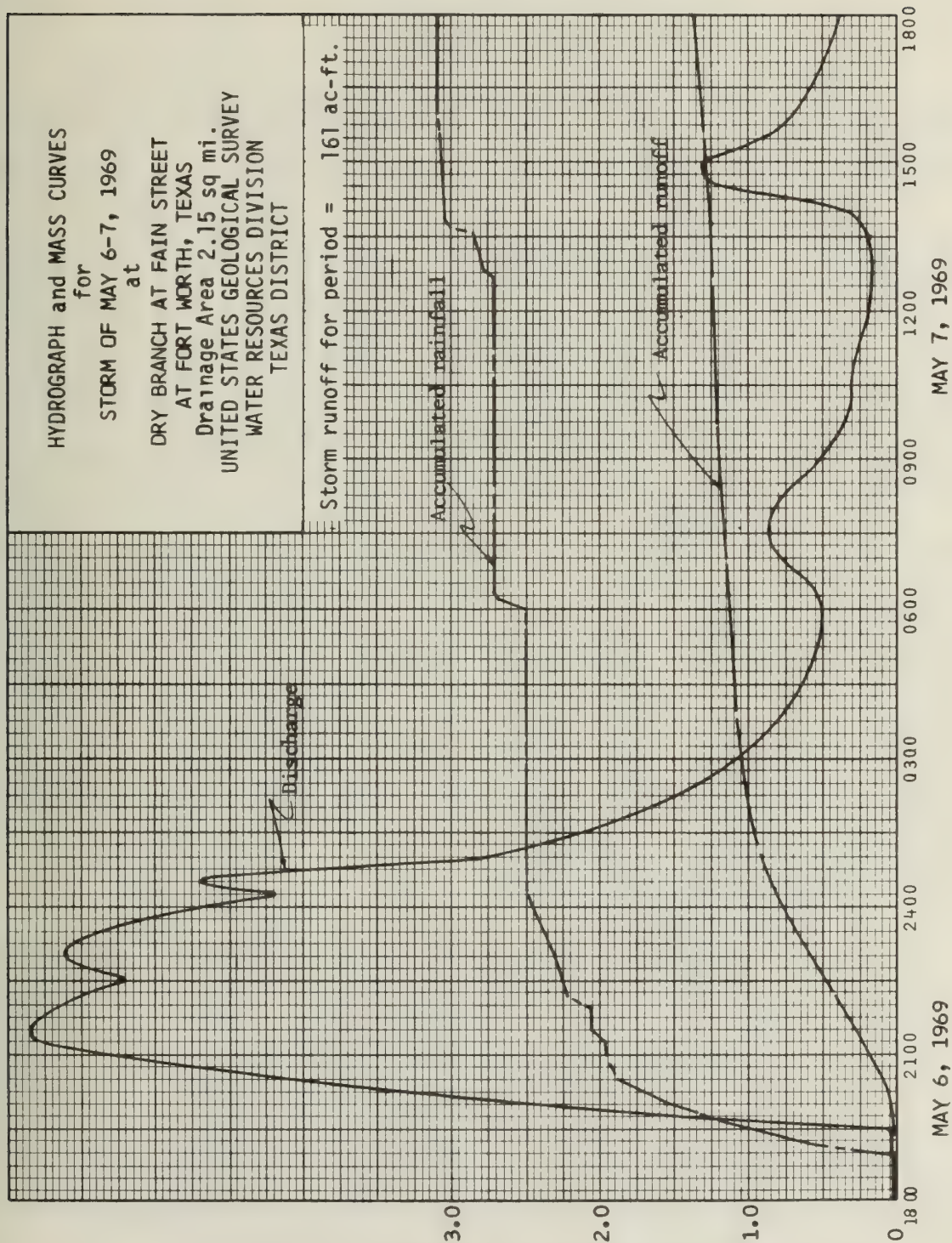
100

50

0

DISCHARGE IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL AND RUNOFF, IN INCHES



GEOLOGICAL SURVEY-AUSTIN DISTRICT

RUNOFF COMPUTATIONS

Station Little Fossil Creek at Mesquite St. at Fort Worth, Tex.
Period of Record May 6-8, 1969 Drainage Area 12.3 mi²

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff		
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.	
			May 6, 1969					
0000	2.71	0	212.0	.0026	.0052	.0052		
0400	2.62		144.0	.0018	.0072	.0124		
0800	2.57		114.0	.0014	.0056	.0180		
1200	2.52		87.5	.0011	.0063	.0243		
1930	2.48		6.93	.0008	.0034	.0277		
1945	3.08		63.25	.0079	.0020	.0297		
2000	3.35		109		.0137	.0331		
2015	4.11		270		.0340	.0416		
2030	5.01		501		.0631	.0574		
2045	6.11		880		.1109	.0851		
2100	7.00		1220		.1537	.1235		
2115	7.72		1410		.1777	.1679		
2130	8.21		1510		.1903	.2155		
2145 ^{PR}	8.30		1530	.25	.1928	.2637		
2200	8.26		1530	.35	.1928	.3360		
2230	7.76		1430	.50	.1802	.4261		
2300	7.27		1320	.75	.1663	.5508		
2400	6.92	0	1190	.50	.1499	.6258		
			4,965.762		24			
			207					
			May 7, 1969					
0000	6.92	0	1190	.50	.1499	.7008		
0100	6.66		1120	1.0	.1411	.8419		
0200	6.12		880	1.5	.1109	1.0083		
0400	5.19		555	2.0	.0699	1.1481		
0600	4.50		368	1.5	.0464	1.2177		
0700	4.29		316	1.0	.0398	1.2575		
0800	4.22		298	1.0	.0375	1.2950		
0900	4.05	0	256	2.0	.0323	1.3596		
			(Cont.)					

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff		
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.	
			May 7- Cont.					
1200	3.85	0	2072.0	.0261	.0522	1.4118		
1300	3.72		178	1.0	.0224	.0224	1.4342	
1400	3.67		168	1.5	.0212	.0318	1.4660	
1600	3.76		187	1.5	.0236	.0354	1.5014	
1700	3.78		192	2.0	.0242	.0484	1.5498	
2000	3.87		211	2.0	.0246	.0532	1.6030	
2100	3.78		192	2.0	.0242	.0484	1.6514	
2400	3.44	0	125	1.5	.0158	.0237	1.6751	
			8325.0/24					
			347		total runoff = 988 ac-ft.			
			May 8, 1969					
0000	3.44	0	125	1.0	.0158	.0158	1.6909	
0200	3.24		90	2.0	.0113	.0226	1.7135	
0400	3.13		71	2.5	.0089	.0222	1.7357	
0700	2.99		50	3.5	.0063	.0220	1.7577	
1100	2.90		38	4.5	.0048	.0216	1.7793	
1600	2.82		30	4.0	.0038	.0152	1.7945	
1900	2.81		29	2.5	.0036	.0090	1.8035	
2100	2.77		26	2.5	.0033	.0082	1.8117	
2400	2.73	0	22	1.5	.0028	.0042	1.8159	
			1119.0/24					
			47					

Computed by GRD Date _____Checked by B.C.M. Date 1-7-70

Add 548.62 ft. to G.Ht. to obtain M.S.L.

Comp. by: GRD
 Date: 11-28-69
 Check by: BCM
 Date: 1-7-70

Area: Little Fossil Creek at Mesquite St., Fort Worth, Tex. Date of storm May 6-7, 8 1969

Date & Time	0.34				0.25				0.41				Accumulated Precipitation in Inches for Recording Gages				Weighted Precipitation	Accumulated Precipitation
	Gage Recorded	x Factor	Gage Recorded	x Factor	Gage Recorded	x Factor	Gage Recorded	x Factor	Gage Recorded	x Factor	Gage Recorded	x Factor	Gage Recorded	x Factor	Gage Recorded	x Factor		
1704.6	1969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1830		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1840		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1850		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900		09	0.0306	0.07	0.015	0.02	0.082	0.01	0.041	0.02	0.082	0.01	0.041	0.02	0.082	0.01	0.041	0.02
1905		22	0.0748	0.10	0.0250	0.18	0.0738	0.10	0.0250	0.18	0.0738	0.10	0.0250	0.18	0.0738	0.10	0.0250	0.18
1910		30	0.1020	0.55	0.1375	0.47	0.1927	0.55	0.1375	0.47	0.1927	0.55	0.1375	0.47	0.1927	0.55	0.1375	0.47
1920		62	0.2108	0.70	0.1750	0.81	0.3321	0.70	0.1750	0.81	0.3321	0.70	0.1750	0.81	0.3321	0.70	0.1750	0.81
1925		65	0.2210	1.05	0.2625	1.05	0.4305	1.05	0.2625	1.05	0.4305	1.05	0.2625	1.05	0.4305	1.05	0.2625	1.05
1940		98	0.3332	1.26	0.3150	1.42	0.5822	1.26	0.3150	1.42	0.5822	1.26	0.3150	1.42	0.5822	1.26	0.3150	1.42
2005		127	0.4318	1.56	0.3900	1.64	0.6124	1.56	0.3900	1.64	0.6124	1.56	0.3900	1.64	0.6124	1.56	0.3900	1.64
2035		132	0.4488	1.63	0.4075	1.85	0.7585	1.63	0.4075	1.85	0.7585	1.63	0.4075	1.85	0.7585	1.63	0.4075	1.85
2115		138	0.4692	1.70	0.4250	1.72	0.7872	1.70	0.4250	1.72	0.7872	1.70	0.4250	1.72	0.7872	1.70	0.4250	1.72
2215		140	0.4760	1.75	0.4375	2.02	0.8282	1.75	0.4375	2.02	0.8282	1.75	0.4375	2.02	0.8282	1.75	0.4375	2.02
2245		150	0.5100	1.89	0.4725	2.11	0.8657	1.89	0.4725	2.11	0.8657	1.89	0.4725	2.11	0.8657	1.89	0.4725	2.11
2315		158	0.5372	1.97	0.4925	2.17	0.8977	1.97	0.4925	2.17	0.8977	1.97	0.4925	2.17	0.8977	1.97	0.4925	2.17
2345		171	0.5814	2.07	0.5175	2.27	0.9307	2.07	0.5175	2.27	0.9307	2.07	0.5175	2.27	0.9307	2.07	0.5175	2.27
May 7 1969																		
2015		180	0.6120	2.16	0.5400	2.37	0.9717	2.16	0.5400	2.37	0.9717	2.16	0.5400	2.37	0.9717	2.16	0.5400	2.37
2040		180	0.6120	2.16	0.5400	2.37	0.9717	2.16	0.5400	2.37	0.9717	2.16	0.5400	2.37	0.9717	2.16	0.5400	2.37
2510		182	0.6188	2.17	0.5425	2.40												

$$K = \frac{\text{Sum of Precipitation} \times \text{Weight Factor}}{\text{Total Recording Gages Weighted Precipitation}}$$

Comp. by:

69-82-11

BCM

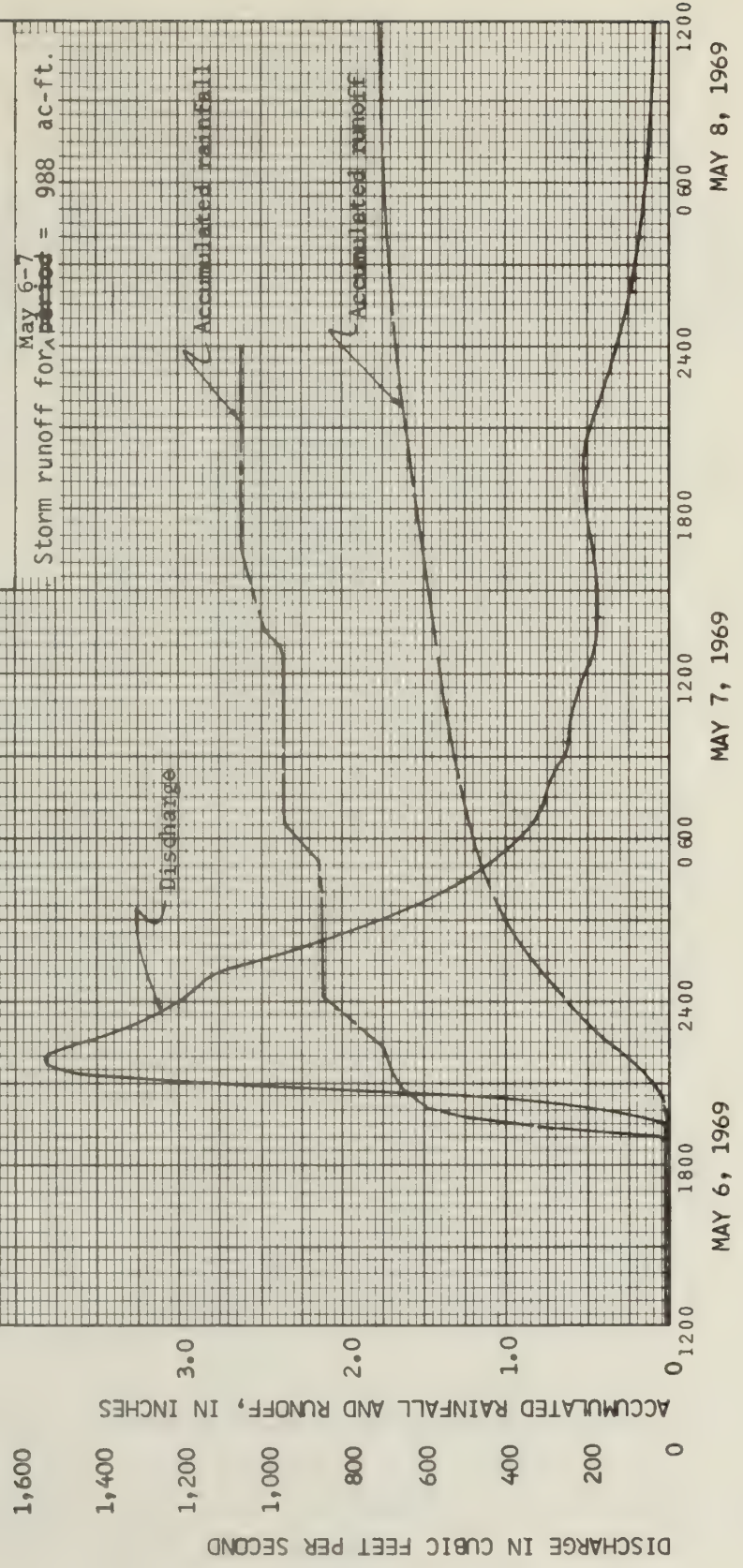
1-7-70

Area	Date of storm	Accumulated Precipitation in Inches for Recording Cases
Area: Little Fossil Creek at Mesquite St. Fort Worth Tex.	May 8, 1969 (cont.)	Accumulated

[illegible]

HYDROGRAPH and MASS CURVES
for
STORMS OF MAY 6-7, 8, 1969
at
LITTLE FOSSIL CREEK AT MESQUITE
STREET, FORT WORTH, TEXAS
Drainage Area
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for ^{May 6-7}~~period~~ = 988 ac-ft.



RUNOFF COMPUTATIONS

P. R sta.

Station Dry Branch at Blandin Street, Fort Worth, Tex
 Period of Record May 6-7, 1969 Drainage Area 1.08 sq mi

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
			May 6				
1905	585.09	0	32				
10	585.15		36				
15	585.48		57				
20	585.84		83				
25	586.01		97				
30	586.10		105				
35	586.14		109				
40	586.25		119				
1950	586.36		130				
2005	586.67		163				
10	586.70		166				
15	586.78		175				
20	586.89		187				
25	586.88		186				
30	586.95		194				
PK 40	586.95		194				
50	586.86		184				
2055	586.76		173				
2115	586.25		119				
40	585.83		82				
2145	585.80		80				
2200	585.68		71				
50	585.54		61				
2300	585.49		57				
50	585.46		55				
2400	585.47	0	56				
			Cont.				

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
			May 7				
0015	585.47	0	56				
30	585.39		50				
0100	585.29		44				
30	585.19		38				
0200	585.13		33				
0230	585.09	0	32				

Computed by GRD Date 10-13-69 Checked by JDB Date 1-7-70

* Recorder operated above 585.09 ft.

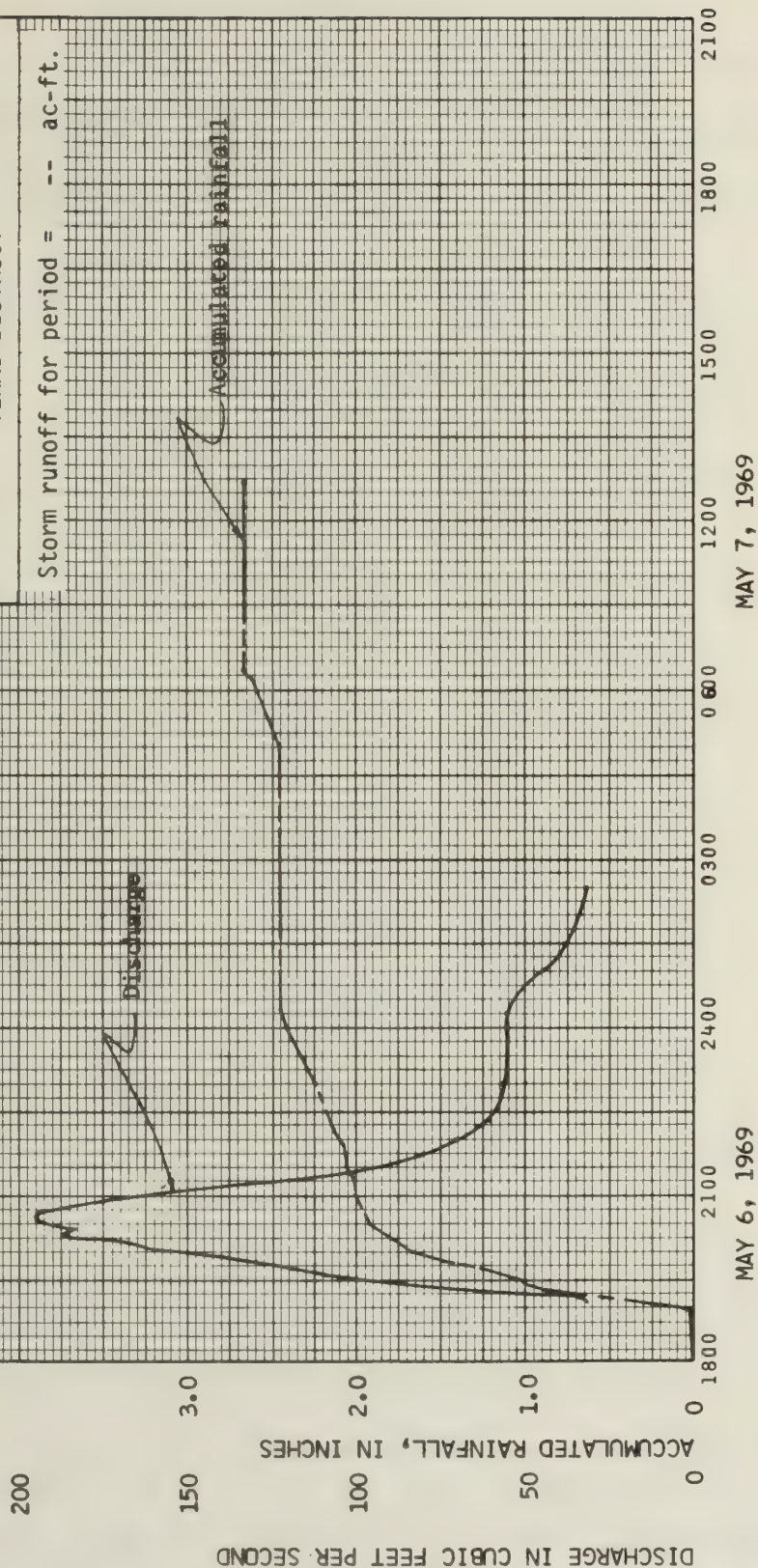
UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY - WATER RESOURCES DIVISION
TEXAS DISTRICT

WEIGHTED-PRECIPITATION RECORD

Study Area		Accumulated Precipitation in Inches for Recording Rain Gages										Date of storm		May 6-7, 1969	
Weight Factor		Gage 1-DB		Gage Recorded x Factor		Gage Recorded x Factor		Date & Time		Gage 1-DB		Gage Recorded x Factor		Accumulated	
Rain Gage	Weight Factor	Recorded	x Factor	Recorded	x Factor	Recorded	x Factor	Recorded	x Factor	Recorded	x Factor	Recorded	x Factor	Weighted Precipitation	Weighted Precipitation
May 6, 1969															
1800		0						May 7 Cont.							
1835		.01						1340							
1855		.02						1350							
1900		.10						1415							
1910		.54						1445							
1920		.88						1525							
1925		1.00						1600							
1930		1.02						2005							
1940		1.26						2010							
1950		1.48						2400							
2000		1.67													
2030		1.92													
2100		2.00													
2115		2.01													
2130		2.06													
2155		2.08													
2210		2.14													
2300		2.24													
2400		2.41													
May 7, 1969															
0020		2.45													
0500		2.46													
0610		2.62													
0625		2.67													
1240		2.67													
1250		2.71													
1300		2.80													
Total Recording Gages Weighted Precipitation =															
MMR															

HYDROGRAPH and MASS CURVE
for
STORM OF MAY 6-7, 1969
at
DRY BRANCH AT BLANDING STREET,
FORT WORTH, TEXAS
Drainage Area 1.08 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.



RUNOFF COMPUTATIONS

Partial-record station

Station Little Fossil Creek at Interstate 820 at Fort Worth, Tex.
Period of Record May 6-8, 1969 Drainage Area 5.64 sq. mi.

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
			May 6				
1920	610.78	0	99				
25	611.02		155				
30	611.06		165				
35	611.19		198				
40	611.29		227				
45	611.23		209				
50	611.19		198				
1955	611.22		206				
2000	611.28		224				
15	611.55		308				
30	611.74		374				
45	612.01		474				
2055	612.06		494				
2105	612.01		474				
20	612.13		522				
25	612.03		482				
2140	612.14		526				
2200	612.36		620				
15	612.51		695				
20	612.51		695				
35	612.42		650				
2250	612.55		715				
2300	612.55		715				
2320	612.55		715				
2400	612.47		675				
			May 7				
0030	612.40		640				
0040	612.26		574				
0100	612.28	0	582				
			(cont.)				

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
			May 7 (cont.)				
0200	612.07	0	498				
0300	611.86		416				
0400	611.70		360				
0500	611.54		304				
0600	611.39		257				
0730	611.31		233				
1000	611.27		221				
1300	611.11		178				
20	611.11		178				
1340	611.19		198				
1400	611.15		188				
1500	611.17		192				
1600	611.22		206				
1700	611.25		215				
1830	611.25		215				
2000	611.15		188				
2200	611.04		160				
2400	610.96		140				
			May 8				
0200	610.89	0	123				

Computed by GRD Date _____ Checked by BCM Date 1-6-70

* Recorder operated above 610.78 ft. ① Sand bar cut-off gage.

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY, SURFACE WATER BRANCH
AUSTIN DISTRICT

WEIGHTED-PRECIPI TATION RECORD

Area: Little Fossil Creek at Interstate Highway 820 Fort Worth, Tex. Date of storm May 6-7, 1969

[illegible]

$$W/P = \frac{\text{Sum of Precipitation} \times \text{Weight Factor}}{\text{Total Recording Gages Weighted Precipitation}}$$

HYDROGRAPH and MASS CURVE for STORM OF MAY 6-7, 1969

at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

800

600

400

200

0

DISCHARGE IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

Discharge

Accumulated rainfall

MAY 6, 1969

MAY 7, 1969

MAY 8, 1969

GEOLOGICAL SURVEY-TEXAS DISTRICT

RUNOFF COMPUTATIONS

Station Dry Branch at Fain St., Fort Worth Tex.
Period of Record Sept. 22, 1969 Drainage Area 2.15 sq mi

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
Sept. 22, 1967							
0000	1.09	0	.38	2.0	.00027	.0005	.0005
0400	1.09		.38	2.5	.00027	.0007	.0012
0500	1.08		.22	2.5	.00016	.0004	.0016
0900	1.08		.22	2.125	.00016	.0003	.0019
0915	1.08		.22	.25	.00016	.0004	.0019
0930	1.31		5.0		.00360	.0009	.0028
0945	2.15		51		.0368	.0092	.0120
1000	2.60		88	.25	.0634	.0158	.0278
1015	3.13		138	.375	.0995	.0373	.0651
1045	3.26		147		.1060	.0398	.1049
1100	3.18		142	.375	.1024	.0384	.1433
1130	2.98		122	.50	.0880	.0440	.1873
1200	2.70		97	.50	.0699	.0350	.2223
1230	2.88		113	.375	.0815	.0306	.2539
1245	2.82		108	.25	.0779	.0195	.2724
1300 ^{PK}	3.38		162	.25	.1168	.0292	.3016
1315	3.17		138	.375	.0995	.0373	.3389
1345	3.17		138	.375	.0995	.0373	.3762
1400	3.05		128	.25	.0923	.0231	.3993
1415	2.50		79	.25	.0570	.0142	.4135
1430	2.00		40	.375	.0288	.0108	.4243
1500	1.77		26	.75	.0187	.0140	.4383
1600	1.56		15	1.5	.0108	.0162	.4545
1800	1.37		6.9	2.5	.0097	.0124	.4649
2100	1.22		3.0	3.0	.00216	.0065	.4734
2400	1.15	0	1.7	1.5	.00123	.0018	.4752
			659.3325		24		
			27				

[illegible]

Computed by GRD Date 11-25-69 Checked by JDB Date 1-8-70

Add 537.51 ft to G. Ht. to obtain MSL

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY, SURFACE WATER BRANCH
AUSTIN DISTRICT

WEIGHTED-PRECIPIATION RECORD

Area: Dry Branch at Fain St, Fort Worth, Tex. Date of storm: Sept. 22, 1969

Date of storm

[illegible]
$$WPR = \frac{\text{Sum of Precipitation} \times \text{Weight Factor}}{\text{Total Recording Gages Weighted Precipitation}}$$

HYDROGRAPH and MASS CURVES
for
STORM OF SEPTEMBER 22, 1969
at
DRY BRANCH AT FAIN STREET
AT FORT WORTH, TEXAS
Drainage Area 2.15 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 54 ac-ft.

200

ACCUMULATED RAINFALL AND RUNOFF, IN INCHES

150

DISCHARGE IN CUBIC FEET PER SECOND

100

50

0

3.0

2.0

1.0

0

Accumulated rainfall

Discharge

Accumulated runoff

2400

1800

1500

1200

0900

SEPTEMBER 22, 1969

GEOLOGICAL SURVEY-TEXAS DISTRICT

RUNOFF COMPUTATIONS

Station Dry Branch at Blandin St., Fort Worth, Tex
Period of Record Sept. 22, 1969 Drainage Area 1.08 sq. mi.

Time	G. Ht. Feet	Sh. Adj.	Discharge			Runoff	
			c.f.s.	Inc.	In/hr.	Inches	Acc. In.
Sept.		22	196	9			
0920	*585.10	0	33				
25	585.16		36				
30	585.45		54				
35	585.72		74				
40	586.03		99				
45	586.25		119				
50	586.33		127				
55	586.36		130				
1000	586.37		131				
05	586.35		129				
10	586.36		130				
15	586.33		127				
30	586.10		105				
40	585.95		92				
1100	585.60		65				
10	585.51		59				
25	585.45		54				
30	585.45		54				
35	585.48		57				
40	585.53		60				
45	585.54		61				
1200	585.61		66				
05	585.65		68				
10	585.72		74				
15	585.82		82				
20	585.94		91				
25	586.06		101				
30	586.27		121				
35	586.41		135				
pk 40	586.45	0	139				

- Cont. -

[illegible]

Computed by GRD Date 11-25-69 Checked by BCM Date 1-8-70

* Recorder operated above 585.10 ft.

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY, SURFACE WATER BRANCH
AUSTIN DISTRICT

WEIGHTED-PRECIPIATION RECORD

Source: Dry Branch at Blandin St, Fort Worth, Tex. Date of storm Sept. 22, 1969

[illegible]
$$W.P. = \frac{\text{Sum of Precipitation} \times \text{Weight Factor}}{\text{Total Recording Gages Weighted Precipitation} = \text{W.M.}}$$

HYDROGRAPH and MASS CURVE
for
STORM OF SEPTEMBER 22, 1969
at
DRY BRANCH AT BLANDING STREET,
FORT WORTH, TEXAS
Drainage Area 1.08 sq mi.
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

200

-5-

DISCHARGE IN CUBIC FEET PER SECOND

150

100

50

0

3.0

2.0

1.0

0

ACCUMULATED RAINFALL, IN INCHES

Discharge

Accumulated rainfall

2400

2100

1800

1500

1200

0900

SEPTEMBER 22, 1969

Annual Compilation and Analysis of Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1970

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY - WATER RESOURCES DIVISION



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Prepared in cooperation with the City of Fort Worth

Annual Compilation and Analysis of Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1970

By G. R. Dempster, Jr. and B. C. Massey

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-WATER RESOURCES DIVISION

Texas District Open-File Report

I. D. Yost, District Chief



Prepared in cooperation with the City of Fort Worth

1972

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ANNUAL COMPILATION AND ANALYSIS OF HYDROLOGIC DATA FOR
URBAN STUDIES IN THE FORT WORTH, TEXAS METROPOLITAN AREA
1970

By

G. R. Dempster, Jr., and B. C. Massey

INTRODUCTION

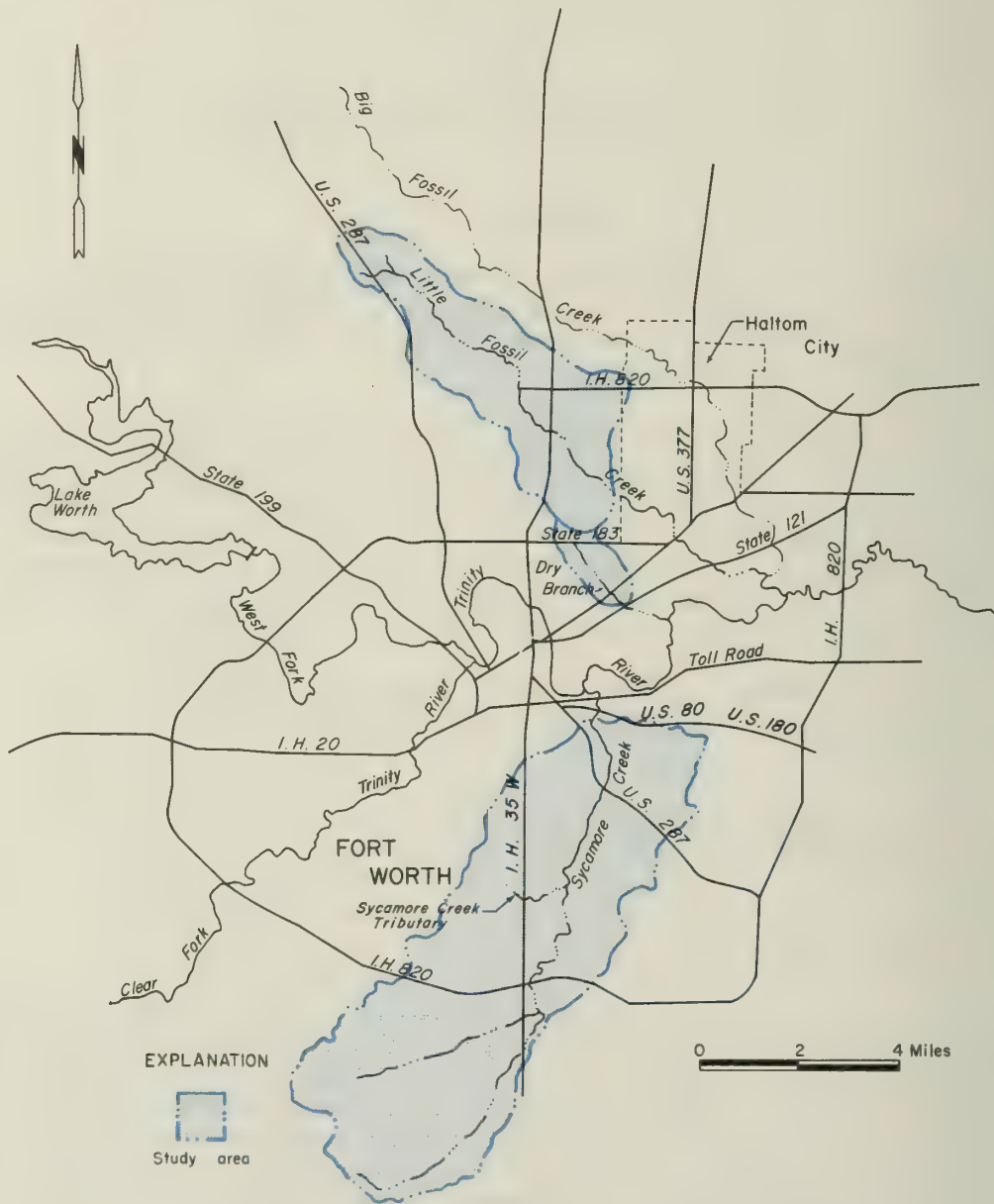
Hydrologic investigations of urban areas in Texas were begun by the U.S. Geological Survey in 1954. These investigations are now in progress in major metropolitan areas including Austin, Dallas, Dallas County, Houston, and San Antonio.

In October 1968, the Geological Survey in cooperation with the city of Fort Worth Department of Public Works began a program of hydrologic investigations on several small streams in Fort Worth. The investigations are designed to evaluate factors affecting floods on small streams in the metropolitan area. Additional streams, one of which drains beneath the impervious area of a shopping center, were added to the program in October 1969. The objectives of the program are:

1. To determine, on the basis of historical data and hydrologic analyses, the magnitude and frequency of floods.
2. To document and define the areal extent of floods of greater than ordinary magnitude.
3. To determine the effect of urban development on flood peaks and volume.

This report is the second in a series of reports to be published annually for the Fort Worth area as part of a continuing program. The report presents the basic hydrologic data collected in four study areas during the 1970 water year (October 1, 1969, to September 30, 1970). The four study areas within the metropolitan area are Dry Branch, Little Fossil Creek, Sycamore Creek (above Interstate Highway 820), and Sycamore Creek tributary (fig. 1). The Sycamore Creek tributary study area includes the highly impervious area of the Seminary South Shopping Center (fig. 1) as a subarea.

To facilitate the publication and distribution of this report at the earliest feasible time, certain material contained herein does not conform to the formal publication standards of the U.S. Geological Survey.



Base from General Highway
map of Texas

FIGURE 1.— Locations of Dry Branch, Little Fossil Creek, Sycamore Creek, and Sycamore Creek tributary study areas

WATERSHED FEATURES

Dry Branch and Little Fossil Creek Study Areas

Dry Branch (fig. 2) is located in the northeast part of Fort Worth. The headwaters originate 1.3 miles northwest of the Fort Worth Refinery. The stream flows southeasterly in an open channel upstream from the refinery and then through a multiplate pipe-arch beneath the refinery. The stream again flows in an open channel downstream from the refinery and continues through a residential section southeastward for about 3.0 miles to the West Fork Trinity River. The stream decreases in altitude from approximately 635 feet above mean sea level at the headwaters above the Fort Worth Refinery to 538.5 feet at Fain Street, a distance of 3.6 miles.

Little Fossil Creek (fig. 2) is located north of downtown Fort Worth in north-central Tarrant County. The headwaters originate in a rural area northwest of Saginaw, and the stream flows in an open channel southeasterly past Saginaw, through the Greater Southwest Corporation Industrial Park, and into the northeast part of Fort Worth. The stream continues its southeasterly course from Fort Worth through Haltom City to Big Fossil Creek, and thence to the West Fork Trinity River (fig. 1). The creek decreases in altitude from approximately 810 feet above mean sea level at the headwaters north of Saginaw to 550 feet at Mesquite Street in northeast Fort Worth, a distance of 9.3 miles.

Sycamore Creek and Sycamore Creek Tributary Study Areas

Sycamore Creek (fig. 3) is located south and east of downtown Fort Worth in south-central Tarrant County. The headwaters originate in a rural area in the southwest section of Fort Worth. Parts of this rural area are beginning to be urbanized. The stream flows in an open channel northeastward, passing beneath Interstate Highway 35-W and into southeast Fort Worth. The stream continues its northeasterly course through residential and light industrial sections of the near-east side of Fort Worth and thence to the West Fork Trinity River. The creek decreases in altitude from approximately 840 feet above mean sea level at the headwaters to 630 feet at Interstate Highway 35-W, a distance of 8.2 miles. The creek decreases in altitude from 630 feet at Interstate Highway 35-W to 496 feet at U.S. Highways 80 and 180 (0.9 mile upstream from West Fork Trinity River), a distance of 7.8 miles. Hydrologic data presented this year are for that portion of the Sycamore Creek Basin upstream from the stream-gaging station at Interstate Highway 35-W.

Sycamore Creek tributary (fig. 3) is within the Sycamore Creek drainage basin. The tributary is in the south-central section of Fort Worth. The headwaters originate approximately 1.3 miles west of Seiminary South Shopping Center (fig. 3). A storm-water drainage system collects runoff from a residential-park area through street gutter inlets upstream from Hemphill Street (fig. 3). The tributary flows easterly through a system of open

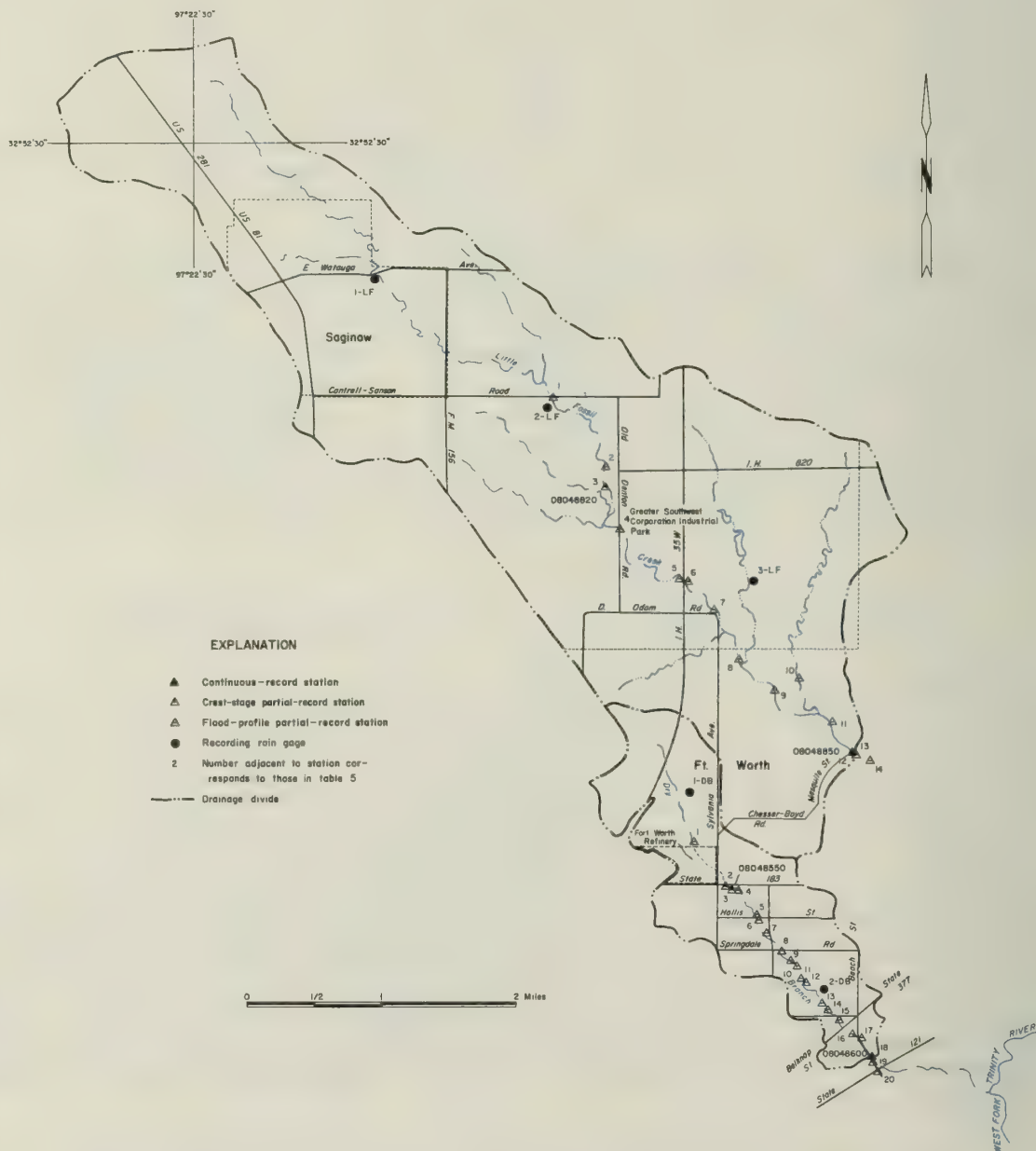
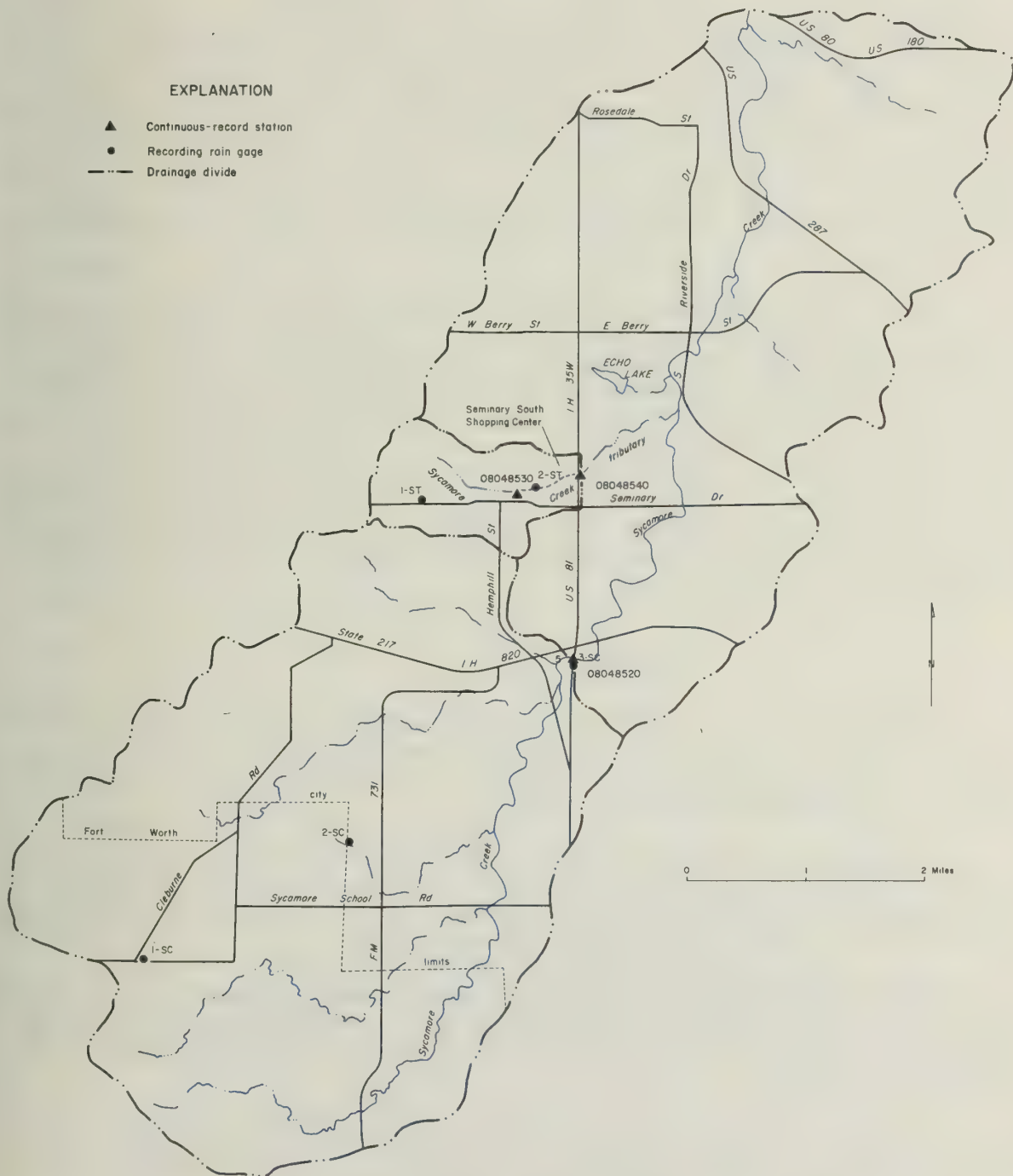


FIGURE 2.—Locations of hydrologic-instrument installations in the Dry Branch and Little Fossil Creek study areas

EXPLANATION

- ▲ Continuous-record station
- Recording rain gage
- Drainage divide



Base from U.S. Geological Survey
topographic quadrangles

FIGURE 3.— Locations of hydrologic-instrument installations in the Sycamore Creek and Sycamore Creek tributary study areas

channel, pipe-arch, and box culverts. Storm water from the shopping center, two peripheral residential-commercial areas, and Interstate Highway 35-W flows into the underground drainage system.

Sycamore Creek tributary decreases in altitude from approximately 760 feet above mean sea level at the headwaters to approximately 649 feet at the west edge of Seminary South Shopping Center, a distance of 1.3 miles. At the western edge of the shopping center and at the entrance of the underground arch culvert, the altitude changes abruptly from 649 feet to 643 feet in a distance of about 25 feet. The tributary then decreases in altitude from 643 feet at the entrance to the concrete arch to 618.7 feet at the downstream side of Interstate Highway 35-W, a distance of approximately 0.7 mile.

The Seminary South Shopping Center contains many retail business establishments and contains large parking areas. There is one high-rise building in the center. The flat roofs of many buildings are topped with aggregate, and considerable storage can occur on the rooftops. The drainage system in the center is composed of gutter inlets connected to many subsurface concrete lateral pipes, each pipe feeding a main. The mains drain into a central concrete arch beneath the center. Runoff (estimated) from the shopping center is the differences of routed runoff between the gaging stations above (No. 08048530) and below (No. 08048540) the shopping center. Because of the impervious area of the shopping center, monthly rainfall and runoff data are presented in table 1.

HYDROLOGIC INSTRUMENTS

Instruments to collect rainfall, runoff, and flood-profile data in the Dry Branch study area consist of two recording rain gages, one continuous-record stream-gaging station, one crest-stage partial-record station, and 16 flood-profile partial-record gages.

Instruments to collect rainfall, runoff, and flood-profile data in the Little Fossil Creek study area consist of three recording rain gages, one continuous-record stream-gaging station, one crest-stage partial-record station, and 11 flood-profile partial-record gages.

In the Little Fossil Creek and Dry Branch drainage basins, three supplemental crest-stage flood-profile stations are located downstream from the study areas to provide additional floodflow elevations in the vicinity of the gaging stations.

Instruments to collect rainfall and runoff data in the Sycamore Creek study area above Interstate Highway 35-W consist of three recording rain gages and one continuous-record stream-gaging station.

Instruments to collect rainfall and runoff data in the Sycamore Creek tributary study area consist of two recording rain gages and two continuous-record stream-gaging stations.

Table 1.--Summary of monthly rainfall-runoff relationship for the 1970 water year at Seminary South Shopping Center.

Month	Rainfall (inches)	Runoff (inches) <u>1/</u>	Ratio of runoff to rainfall <u>1/</u>
1969			
October	--	1.77	--
November	--	.28	--
December	1.48	1.29	0.87
1970			
January	.40	.28	.70
February	3.49	2.78	.80
March	2.61	2.36	.90
April	3.79	1.98	.52
May	2.61	1.68	.64
June	.28	.54 <u>2/</u>	--
July	.41	.38 <u>2/</u>	.93 <u>2/</u>
August	2.22	.35	.16
September	5.76	3.06	.53

1/ Data unadjusted for sustained low-flow effluents from shopping center.

2/ Data particularly affected by low-flow effluents.

Note: Rain gage (2-ST) at shopping center was installed in November 1969 (see fig. 3 for location of rain gage and gaging stations used to determine runoff).

Altitude at the recording stations is referred to mean sea level, or may be converted to mean sea level.

Locations of hydrologic instruments in the study areas are shown on figures 2 and 3. Pertinent individual station information is included in the section "Compilation and analysis of data".

DATA COLLECTION AND EXPLANATION

Rainfall

Ten recording rain gages distributed throughout the four study areas provide a measure of total rainfall and are used to define rainfall intensities.

Prior to the 1970 water year, rainfall was compiled on a storm basis (a period of rainfall separated by at least 6 hours from other rainfall). In this report, rainfall is compiled on a daily basis to facilitate comparison with U.S. Weather Bureau records, comparisons among study-area rain gages, and potential use in mathematical rainfall-runoff models.

Weighted-mean rainfall for a study area or subarea is determined by the Thiessen method using gages located within a particular drainage boundary. In some areas, the Thiessen weight values are nearly equal and rainfall amounts are arithmetically averaged. Equations used to compute weighted-mean rainfall on the area above each continuous-record stream-gaging or crest-stage partial-record station are summarized in table 2.

Runoff

Runoff data are based on discharge measurements and stage records at seven stream-gaging locations and peak elevations at 30 flood-profile locations. Of the seven stream-gaging locations, five are continuous-record stream-gaging stations and two are crest-stage partial-record gaging stations.

A water-stage recorder at a continuous-record stream-gaging station records the full range in stage, which together with measurements of streamflow, allows the computation of total runoff at the station.

A water-stage recorder at a crest-stage partial-record gaging station records only stages above an arbitrary or selected elevation, which together with measurements of streamflow, allows computation of the upper part of the runoff hydrograph. These stations are located at sites where limited streamflow data collected systematically over a period of years are needed.

A crest-stage flood-profile gage, located at selected sites along the stream or on tributaries, records the peak water stage reached during the passage of a flood.

Table 2.--Equations used to compute weighted-mean rainfall on the area above each continuous-record stream-gaging or crest-stage partial-record station.

Station	USGS gage ident. no.	Weighted-mean rainfall equation
Dry Branch at Blandin Street	08048550	(1.00) (1-DB)
Dry Branch at Fain Street	08048600	(0.50) (1-DB) +(0.50) (2-DB)
Little Fossil Creek at Interstate Highway 820	08048820	(0.76) (1-LF) +(0.24) (2-LF)
Little Fossil Creek at Mesquite Street	08048850	(0.34) (1-LF)+(0.25) (2-LF) +(0.41) (3-LF)
Sycamore Creek at Interstate Highway 35-W	08048520	(0.33) (1-SC)+(0.48) (2-SC) +(0.19) (3-SC)
Sycamore Creek tributary above Seminary South Shopping Center	08048530	(0.78) (1-ST)+(2.00) (2-ST)
Sycamore Creek tributary at Interstate Highway 35-W	08048540	(0.56) (1-ST)+(0.44) (2-ST)
Seminary South Shopping Center	--	(1.00) (2-ST)

Note: For locations of stations identified by the U.S. Geological Survey Identification Number, see figs. 2 and 3. Rain-gage designations are DB-Dry Branch area, LF-Little Fossil Creek area, SC-Sycamore Creek area, and ST-Sycamore Creek tributary area; for rain gage locations, see figs. 2 and 3.

Two continuous-record stream-gaging stations were installed this year in the Sycamore Creek tributary basin (fig. 3). The purpose of these stations is to (1) collect hydrologic data from the residential-park area west of Seminary South Shopping Center (upstream station), and (2) collect hydrologic data from both the residential-park area and the shopping center (downstream station). The difference in runoff between these two stations equals the runoff from the impervious area of the shopping center. Sustained low-flow effluents occur at both stations most of the time.

Information on monthly runoff (volumetric) and selected individual storm runoff from the shopping center is presented in later sections of this report. Analyses of an individual storm at the shopping center requires routing the upstream hydrograph to the downstream station by using estimated travel times of 5 to 50 minutes (depending upon upstream discharge). It is assumed that little or no attenuation of upstream discharge occurs. The routed discharges are deducted from the downstream discharges; these differences equal the discharges (estimated) from the impervious area of the shopping center. Table 1 presents a summary of rainfall-runoff relationships for the current year at Seminary South Shopping Center.

SUMMARY OF DATA FOR THE 1970 WATER YEAR

Each year, storm events that will be useful in achieving the objectives of the study are selected for detailed rainfall-runoff analysis. The event during which the annual maximum discharge occurs is usually included in the selection. A digital computer was used this year to aid in the processing of some of the individual station storm data.

During the 1970 water year, storms selected for analysis occurred on October 12, 1969, April 30, May 30, and September 16-17, 1970, in the Dry Branch Basin; December 28-29, 1969, April 30, and September 16-17, 1970, in the Little Fossil Creek Basin; April 30, May 30, and September 16-17, 1970, in Sycamore Creek Basin; and April 25, April 30, May 30, and September 16-17, 1970, in Sycamore Creek tributary Basin.

Summaries of storm rainfall-runoff data for selected individual storms at streamflow stations and crest-stage partial-record stations are given in tables 3 and 4, respectively. Detailed storm rainfall and runoff records, hydrographs, and mass curves for each station are shown in the section "Compilation and analysis of data".

The rainfall-runoff ratios indicate that some retention occurs within the shopping center. Much of this retention is probably on roof tops.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Selected storm rainfall-runoff data, at streamflow stations, water year 1970.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048600 Dry Branch at Fain Street, Fort Worth, Tex. (Drainage area, 2.15 sq mi)								
Oct. 12, 1969	5.5	2.61	0.35	0.58	0.94	0.56	0.21	170
Apr. 30, 1970	8.5	1.52	.37	.72	1.05	.63	.41	200
May 30, 1970 <u>1/</u>	4.5	2.29	.58	.91	1.64	.77	.34	338
Sept. 16-17, 1970	23.2	3.91	.44	.79	1.46	1.02	.26	250
08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex. (Drainage area, 12.3 sq mi)								
Dec. 28-29, 1969	32.2	2.04	0.18	0.27	0.37	0.65	0.32	550
Apr. 30, 1970	8.8	1.61	.34	.66	1.05	.90	.56	1,370
Sept. 16-17, 1970	21.8	4.31	.49	.65	1.10	.58	.13	425

^{1/} Second storm of day.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Selected storm rainfall-runoff data, at streamflow
stations, water year 1970--Continued.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 17.7 sq mi)								
Apr. 30, 1970	7.8	1.19	0.38	0.72	1.01	0.47	0.39	1,020
May 30, 1970 <u>1/</u>	4.8	1.38	.72	1.03	1.17	.45	.33	1,140
Sept. 16-17, 1970	23.8	1.56	.21	.43	.83	.21	.14	900
08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex. (Drainage area, 0.97 sq mi)								
Apr. 25, 1970 <u>1/</u>	2.6	1.05	0.60	0.73	0.78	0.47	0.45	339
Apr. 30, 1970	10.5	1.25	.47	.69	1.03	.61	.49	331
May 30, 1970 <u>2/</u>	1.25	1.20	.69	.91	1.17	.20	.17	282
Sept. 16-17, 1970 <u>3/</u>	14.2	2.53	.34	.59	1.05	.68	.27	262
<u>1/</u> Second storm of day. <u>2/</u> First storm of day. <u>3/</u> Main part of storm.								

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Selected storm rainfall-runoff data, at streamflow stations, water year 1970--Continued.

[illegible]

1/	Second storm of day.
2/	First storm of day.
3/	Main part of storm.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 4.--Selected storm rainfall-runoff data, at crest-stage
partial-record stations, water year 1970.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048550 Dry Branch at Blandin Street, Fort Worth, Tex. (Drainage area, 1.08 sq mi)								
Oct. 12, 1969	5.5	2.50	0.35	0.63	0.98	--	--	118
Apr. 30, 1970 ^{3/}	2.6	1.51	.52	.82	1.29	--	--	167
May 30, 1970 ^{1/}	1.3	2.01	.75	1.02	1.49	--	--	298
Sept. 16-17, 1970 ^{3/}	10.3	3.97	.49	.78	1.38	--	--	247
08048820 Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. (Drainage area, 5.64 sq mi)								
Dec. 28-29, 1969	19.5	2.16	0.15	0.26	0.53	--	--	343
Sept. 16-17, 1970	12.5	4.18	.48	.66	1.24	--	--	515

Yearly rainfall and runoff for the 1970 water year for the study areas with continuous record-gaging stations in the Fort Worth metropolitan area are summarized in the following table:

Station	Yearly mean rainfall (inches)	Yearly runoff (inches)	Ratio of runoff to rainfall
Dry Branch at Fain Street (08048600)	36.36	10.29	0.28
Little Fossil Creek at Mes- quite Street (08048850)	35.30	8.22	.23
Sycamore Creek at Inter- state Highway 35-W (08048520)	--	7.51	--
Sycamore Creek tributary above Seminary South Shopping Center (08048530)	--	10.64	--
Sycamore Creek tributary at Interstate Highway 35-W (08048540)	--	12.34	--
Seminary South Shopping Center	--	16.75	--

Note: Rain gages in the Sycamore Creek study area were installed during November 1969 and February 1970. See "Remarks" paragraph of station descriptions in the section "Compilation and analysis of data" for information about regulation or diversion.

Other data, including daily and monthly rainfall and daily and monthly runoff for the 1970 water year, are included in the section "Compilation and analysis of data". In addition, flood-profile data for up to seven storms during the water year are listed in table 5.

Table 5.--Peak elevations at flood-profile partial-record stations, water year 1970.

Map No.	Station No.	Station name and location of floodmark	Drainage area (sq mi.)	Distance above mouth (miles)	FLOOD ELEVATIONS						
					Oct. 12, 1969	Dec. 29, 1969	Feb. 24, 1970	Apr. 25, 1970	May 30, 1970	Sept. 16, 1970	
Dry Branch basin											
1		Dry Branch at Texas and Pacific RR spur-Rb	-	*3.41	<596.97	-	-	<596.97	597.17	a/	597.39
2		Dry Branch at Grace Street-DsLb	-	*2.86	586.84	-	-	<586.79	588.24	588.24	587.89
3	08048550†	Dry Branch at Blandin Street-24 ft UsLb	1.08	*2.82	586.24	-	-	586.06	587.75	587.75	587.40
4		Dry Branch at Blandin Street-DsLb	-	*2.80	586.13	-	-	-	587.67	587.68	587.35
5		Dry Branch at Hollis Street-60 ft UsRb	-	*2.52	582.70	-	-	<582.10	584.48	586.44	584.60
6		Dry Branch at Hollis Street-10 ft DsLb	-	*2.49	<580.63	-	-	580.63	581.64	582.93	582.21
7		Dry Branch at Selma Street-120 ft UsLb	-	*2.38	<577.76	-	-	579.44	581.56	582.89	579.42
8		Dry Branch at Springdale-DsRb	-	*2.18	568.68	-	-	<568.36	569.87	571.46	571.46
9		Dry Branch at Bonnie Brae-80 ft UsLb	-	*2.07	567.65	-	-	<567.06	569.06	570.98	569.32
10		Dry Branch between Bonnie Brae and Aster Court	-			-	-				
11		Dry Branch at Carnation Street-20 ft UsRb	-	*1.98	565.92	-	-	<564.92	566.80	568.37	567.31
12		Dry Branch at Carnation Street-100 ft UsRb	-	*1.89	563.87	-	-	563.47	564.83	566.64	565.46
13		Dry Branch at Robinwood Street-150 ft DsLb	-	*1.85	563.27	-	-	563.11	564.17	564.97	564.57
14		Dry Branch between Robinwood and Yucca Streets	-	*1.65	559.42	-	-	558.80	562.14	562.38	563.00
15		Dry Branch between Yucca and Belknap Streets-Rb	-	*1.56	<556.16	-	-	<556.16	557.18	558.16	557.68
16		Dry Branch at Beach Street-UsLb	-	*1.46	553.88	-	-	<553.46	554.76	555.18	554.87
17		Dry Branch at Beach Street-DsRb	-	*1.29	544.25	-	-	543.92	544.58	546.06	544.98
18	08048600†	Dry Branch at Fain Street-UsRb	2.15	*1.23	<542.50	-	-	<542.50	542.80	543.46	543.42
19		Dry Branch at Fain Street-DsRb	-	*1.06	540.99	-	-	540.98	541.29	542.49	541.76
20		Dry Branch at State Highway 121-UsLb	-	*.99	a/	538.96	-	<539.06	539.54	540.59	539.01
Little Fossil Creek basin											
1		Little Fossil Creek at Cantrell-Samson Roads-DsLb	-	8.42	636.96	638.23	638.09	638.64	638.23	<636.88	637.30
2		Little Fossil Creek at Interstate Highway 820-UsRb	-	7.73	<616.60	616.80	617.06	617.36	617.16	<616.60	616.80
3	08048820†	Little Fossil Creek at Interstate Highway 820-DsRb	5.64	7.55	611.80	612.28	612.31	613.00	612.81	611.52	612.73
4		Little Fossil Creek at Old Denton Road-DsRb	-	7.14	<602.46	603.24	602.98	603.50	603.62	<602.46	603.26
5		Little Fossil Creek at Interstate Highway 35-W	-								
6		Little Fossil Creek at Interstate Highway 35-W	-	6.35	<591.16	591.76	591.86	592.24	592.39	<591.16	a/
7		Little Fossil Creek at Watauga (Sylvania Avenue)	-	6.26	590.19	591.07	591.08	591.22	591.42	589.20	591.27
8		Little Fossil Creek midway between Watauga Road and St. Louis Southwestern RR-Rb	-	5.93	<584.29	<584.29	584.54	585.85	585.85	<584.29	584.72
9		Little Fossil Creek at St. Louis Southwestern RR	-	5.50	<577.56	<577.56	<577.56	<577.56	577.02	<577.56	<577.56
10		Little Fossil Creek at St. Louis Southwestern RR-DsRb	-	5.12	<568.32	569.30	569.97	569.96	570.64	<568.32	569.38
11		Little Fossil Creek tributary at St. Louis Southwestern RR-DsRb	-	-	<573.80	<573.80	<573.80	<573.80	574.10	<573.80	<573.80
12	08048850†	Little Fossil Creek at Mesquite Street-Rb	12.3	4.54	a/	<559.43	560.15	560.45	560.95	<559.43	<559.43
13		Little Fossil Creek at Beach Street-UsRb	-	4.24	553.80	553.80	554.80	555.42	556.31	553.68	553.54
14		Little Fossil Creek at Beach Street-DsRb	-	4.20	<556.24	<556.24	<556.24	<556.24	555.64	<556.24	555.62
15		Little Fossil Creek at Beach Street-DsRb	-	4.11	549.82	551.12	551.82	552.28	552.89	551.18	550.62

* Distances based on consultant's report by Knowlton-Ratliff-English, 1967.

† Continuous-record station.

< Crest-stage partial-record station.

< Less than elevation shown.

a/ Elevation unknown; gage inoperative or destroyed.

Ds Downstream.

Us Upstream.

Rb Right bank.

Us Upstream.

NOTE: Elevations for floods of Dec. 29 and Feb. 24 were below most crest-stage gages in Dry Branch basin.

C O M P I L A T I O N A N D A N A L Y S I S O F D A T A

TRINITY RIVER BASIN

08048600 Dry Branch at Fain Street, Fort Worth, Tex.

LOCATION.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft upstream from culverts on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles upstream from mouth, and 2.9 miles northeast of County Courthouse.

DRAINAGE AREA.--2.15 sq mi (revised).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 338 cfs May 30 (gage height, 4.98 ft); minimum daily, 0.05 cfs Sept. 11.
Period of record: Maximum discharge, 338 cfs May 30, 1970 (gage height, 4.98 ft); minimum daily, 0.05 cfs Sept. 11, 1970.
Maximum stage since April 1964, 9.0 ft in April 1966 at upstream side of Fain street culvert, from information by local resident (discharge not determined).

REMARKS.--Records good above 1 cfs and fair below. Low flow sustained by effluent from commercial establishments and industry above station. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.38	.27	.43	12	1.1	.24	2.7	.73	.38	.13	6.7
2	.38	1.5	.27	1.7	1.0	1.7	.43	.90	.30	.22	.21	10
3	.38	.42	.27	.26	.57	14	.38	.32	.22	.25	.22	.26
4	.38	1.3	.27	.22	.49	1.5	.41	.22	.25	.38	.22	.15
5	.38	.41	3.3	3.8	.40	1.2	.22	.23	.14	.38	.20	.08
6	.22	.46	7.1	.77	.35	8.2	.22	.22	.15	.38	.13	.08
7	.22	.38	1.2	.49	.41	4.0	.33	.22	.08	.38	.13	.08
8	.22	.38	.30	.30	.53	1.5	.36	.22	.08	.38	.13	.09
9	.22	.29	.27	.23	.23	.87	.49	.22	.08	.45	.13	.08
10	.22	.22	.27	.38	.22	.54	.82	.22	.08	.52	.13	.06
11	.22	.22	.27	.29	.36	3.9	.32	.22	.13	.38	.13	.05
12	31	.22	.29	.22	.60	2.5	.45	.22	.22	2.8	.13	.07
13	1.8	.22	.32	.22	.22	1.2	.22	.25	.22	.24	.13	5.3
14	.28	.22	.22	.22	.22	.78	.22	.29	.22	.20	.08	.47
15	.22	.22	.22	.22	4.9	.61	.72	.22	.22	.22	.08	.24
16	.22	.26	.22	.22	.30	2.8	1.5	.22	.22	.22	.13	40
17	.22	1.1	.27	.22	.22	6.2	.32	.22	.22	.22	.10	19
18	.22	.22	.22	.22	.22	1.5	9.4	.22	.22	.17	.13	.36
19	.22	.22	.27	.27	.22	1.6	1.5	.22	.22	.13	1.0	.18
20	.22	.25	.27	.22	.22	10	.22	.22	.22	.21	.10	.12
21	.22	.38	.27	.22	.22	8.1	.22	.22	.22	.23	.08	.08
22	.22	.26	.27	.22	1.9	1.5	.22	.23	.22	.22	.08	.08
23	.22	.22	.27	.26	4.2	1.1	.99	.82	.22	.22	3.3	16
24	.22	.22	.22	.30	37	.65	.26	1.6	.22	.22	.10	.46
25	.22	.27	.22	.26	6.9	.38	39	.41	.38	.22	.08	.25
26	.22	.27	.27	.30	1.2	.38	3.6	3.7	.22	.22	.08	3.6
27	13	1.4	.27	.22	1.6	.28	1.2	1.7	.22	.22	.08	.29
28	1.8	.23	1.9	.22	8.6	.22	.45	5.5	.22	.22	.08	.22
29	2.6	.22	19	.27	-----	.22	.38	.38	.22	.22	2.6	.13
30	2.9	.22	1.1	.31	-----	.22	34	45	.22	.23	.81	.13
31	.40	-----	.61	.32	-----	.22	-----	4.6	-----	.18	.75	-----
TOTAL	59.64	12.48	39.74	13.90	85.30	78.97	99.08	71.93	6.58	10.91	11.68	104.61
MEAN	1.92	.42	1.28	.45	3.05	2.55	3.30	2.32	.22	.35	.38	3.49
MAX	31	1.5	.19	3.8	37	14	39	45	.73	2.8	3.3	40
MIN	.22	.22	.22	.22	.22	.22	.22	.22	.08	.13	.08	.05
CFSM	.89	.19	.60	.21	1.42	1.18	1.54	1.08	.10	.16	.18	1.62
IN.	1.03	.22	.69	.24	1.48	1.37	1.71	1.24	.11	.19	.20	1.81
AC-FT	118	.25	.79	.28	169	157	197	143	.13	.22	.23	207
††	4.73	0.58	2.77	0.52	4.64	3.38	4.93	4.26	0.08	0.52	1.60	8.37

CAL YR 1969 TOTAL 642.25 MEAN 1.76 MAX 44 MIN .08 CFSM .82 IN 11.11 AC-FT 1,270 †† 35.16
WTR YR 1970 TOTAL 594.82 MEAN 1.63 MAX 45 MIN .05 CFSM .76 IN 10.29 AC-FT 1,180 †† 36.38

†† Weighted mean rainfall, in inches, based on 2 rain gages.

PEAK DISCHARGE (BASE 100 CFS)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
10-12	1730	3.48	170	5-30	1940	4.98	338
4-25	1605	3.47	169	9-16	2000	4.25	250
4-30	0900	3.78	200	9-23	0110	2.83	109

TRINITY RIVER BASIN

08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex.

LOCATION.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles northeast of County Courthouse, and approximately 4.3 miles upstream from Big Fossil Creek.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,370 cfs Apr. 30 (gage height; 7.68 ft); no flow at times in July, Aug., and Sept. Period of record: Maximum discharge, 1,530 cfs May 6, 1969 (gage height, 8.30 ft); no flow at times each year. Maximum stage since 1955, 10.5 ft (at Alta Vista Road) in September 1962, from information by local resident (discharge not determined). Flood of Mar. 20, 1968, reached a stage of 8.7 ft, from floodmarks at upstream side of Alta Vista Road bridge (discharge not determined).

REMARKS.--Records good. Flow slightly regulated by several small floodwater-retarding structures on tributaries above station. Low flow sustained at times by effluent from industrial park 2.6 miles upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	1.5	.44	4.0	25	15	2.8	26	3.6	.03	0	.63
2	.21	1.9	.44	5.5	8.1	11	2.6	7.7	2.1	.03	0	6.6
3	.13	1.8	.44	4.4	3.6	124	2.2	5.1	1.6	.01	0	1.2
4	.13	2.5	.44	3.3	2.8	15	2.0	3.9	1.3	0	0	.49
5	.17	1.9	2.4	8.3	2.6	7.3	1.8	3.4	1.2	0	0	.23
6	.21	1.4	10	6.5	2.3	24	1.6	2.8	.96	0	0	.09
7	.13	1.2	6.5	4.2	2.2	77	1.4	2.3	.72	0	0	.04
8	.10	1.1	1.7	3.3	2.0	14	1.4	2.2	.65	0	0	.02
9	.07	.81	1.2	2.6	1.8	8.7	1.4	2.0	.54	0	0	0
10	.05	.81	.99	2.4	1.7	5.1	2.4	1.6	.57	0	.01	0
11	.03	.72	.92	2.6	1.6	7.3	2.0	1.4	.57	0	.01	0
12	39	.56	.77	2.4	1.4	5.1	1.4	1.3	.71	.07	.01	0
13	18	.57	.69	2.2	1.5	5.1	1.3	1.3	.64	.24	.01	9.6
14	2.2	.42	.62	2.1	1.5	4.2	1.2	1.2	.52	.04	.01	2.3
15	1.1	.56	.69	2.0	6.1	3.4	2.0	1.2	.46	.01	.01	.29
16	.78	.70	.57	1.8	4.0	4.2	2.4	1.2	.41	0	0	50
17	.50	1.1	.61	1.8	2.5	35	2.6	1.1	.33	0	0	134
18	.50	.80	.47	1.7	1.9	5.7	15	.86	.24	0	0	5.7
19	.53	.65	.43	1.8	1.7	5.4	7.4	.81	.20	0	.06	2.2
20	.45	.67	.38	1.7	1.6	34	3.1	.81	.17	0	0	1.3
21	.44	.51	.38	1.6	1.5	84	2.0	.81	.16	0	0	.80
22	.35	.50	.42	1.5	2.2	18	1.8	.81	.10	0	0	.72
23	.32	.57	.38	1.7	9.1	7.3	1.8	.83	.09	0	.20	26
24	.32	.45	.36	1.6	345	5.1	1.6	1.5	.08	0	.01	5.2
25	.32	.44	.38	1.4	107	3.4	260	.99	.20	0	0	2.0
26	.41	.44	.38	1.3	13	3.4	40	1.0	.10	0	0	2.4
27	15	.86	.34	1.3	8.7	3.1	9.2	1.3	.11	0	0	1.4
28	4.5	.69	1.3	1.4	77	3.1	6.5	3.5	.10	0	0	1.0
29	3.7	.57	184	1.2	-----	3.1	5.1	1.3	.09	0	.07	.88
30	4.7	.51	15	1.2	-----	3.1	272	51	.04	0	.01	.80
31	2.0	-----	5.5	1.2	-----	3.1	-----	25	-----	0	.05	-----
TOTAL	96.67	27.21	239.14	80.0	639.4	547.2	658.0	156.22	18.56	0.43	0.46	255.89
MEAN	3.12	.91	7.71	2.58	22.8	17.7	21.9	5.04	.62	.014	.015	8.53
MAX	39	2.5	184	8.3	345	124	272	51	3.6	.24	.20	134
MIN	.03	.42	.34	1.2	1.4	3.1	1.2	.81	.04	0	0	0
CFSM	.25	.07	.63	.21	1.86	1.44	1.78	.41	.05	.001	.001	.69
IN.	.29	.08	.72	.24	1.93	1.65	1.99	.47	.06	.001	.001	.77
AC-FT	192	54	474	159	1,270	1,090	1,310	310	37	.9	.9	508

CAL YR 1969	TOTAL 2,449.15	MEAN 6.71	MAX 347	MIN 0	CFSM .55	IN 7.41	AC-FT 4,860
WTR YR 1970:	TOTAL 2,719.18	MEAN 7.45	MAX 345	MIN 0	CFSM .61	IN 8.22	AC-FT 5,390

PEAK DISCHARGE (BASE, 290 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-12	1800	4.22	298	4-25	1600	6.78	1,070
12-29	0930	5.18	550	4-30	0930	7.68	1,370
2-24	1945	6.18	912	5-30	2000	5.08	469
3- 3	1100	4.50	368	9-16	2145	4.92	425

TRINITY RIVER BASIN

08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°39'55", long 97°19'16", Tarrant County, on left bank at upstream side of bridge on frontage road on upstream side of Interstate Highway 35-W, 5.8 miles south of City Hall, and 8.9 miles upstream from mouth.

DRAINAGE AREA.--17.7 sq mi.

PERIOD OF RECORD.--October 1969 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,140 cfs May 30 (elevation, 634.08 ft); no flow at times.

Flood of May 6, 1969, reached an elevation of 640.1 ft, from floodmarks (discharge not determined). Flood in 1908 reached an elevation of 645.9 ft (discharge not determined), and flood in 1938 reached an elevation of 644.4 ft (discharge not determined), from information by State Highway Department.

REMARKS.--Records poor prior to Nov. 13 and good thereafter. Flow is slightly affected by several small farm ponds on tributaries above station. At times, low flow may be sustained by effluents from commercial establishments. Two recording rain gages are operated in basin above this station and one recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.80	.12	3.3	60	20	5.7	21	36	0	0	23
2	0	1.2	.04	9.6	12	18	4.8	9.0	7.8	0	0	43
3	0	.80	.02	4.1	4.4	100	4.4	6.2	5.0	0	0	2.2
4	0	.85	.02	2.9	3.2	22	3.6	5.0	3.9	0	0	.55
5	0	.50	5.6	17	2.5	14	3.2	4.0	3.4	0	0	.21
6	0	.30	33	9.2	2.5	42	3.2	3.4	2.4	0	0	.09
7	0	.15	18	5.0	2.6	63	2.9	2.3	1.8	0	0	.02
8	0	.07	5.7	3.7	2.9	23	3.2	2.0	1.4	0	0	0
9	0	.04	2.0	2.9	2.0	14	2.6	1.7	1.0	0	0	0
10	0	.02	1.7	2.9	1.6	10	3.6	1.4	.86	0	0	0
11	0	.02	1.7	2.9	1.6	59	2.9	1.3	.74	0	0	0
12	30	.01	1.5	2.5	1.4	25	2.2	1.0	.59	.75	0	.01
13	20	.01	1.2	2.0	1.6	14	1.7	.81	.32	.19	0	4.1
14	1.0	.01	1.0	2.4	1.6	11	1.7	.67	.08	.02	0	1.4
15	.50	.01	.87	1.8	19	9.3	2.2	.48	.03	0	0	.19
16	.20	.01	.87	1.7	4.9	134	7.7	.25	.01	0	0	88
17	.10	19	.71	1.6	2.5	218	4.4	.16	.02	0	0	12
18	0	3.6	.45	1.3	2.3	24	19	.10	.01	0	0	1.7
19	0	.87	.35	1.1	1.7	18	12	.05	.02	0	0	7.3
20	0	.45	.35	1.4	1.3	87	3.6	.03	.06	0	0	2.6
21	0	.12	.35	1.1	1.3	122	2.0	.02	.01	0	0	.57
22	0	.07	.26	.87	5.6	31	1.5	.06	0	0	0	.55
23	0	.04	.25	1.0	14	18	1.5	.45	0	0	12	44
24	0	.02	.22	1.3	315	14	1.0	6.9	0	0	.33	3.1
25	0	.01	.13	1.2	182	10	178	6.3	0	0	.08	1.3
26	0	.01	.07	1.1	22	7.8	41	1.7	0	0	.02	17
27	0	.87	.04	1.2	18	7.6	10	.83	0	0	.02	2.8
28	0	1.2	1.1	1.1	57	6.6	6.4	18	0	0	0	1.1
29	1.0	.57	71	.98	-----	6.2	4.7	4.8	0	0	1.1	.68
30	75	.26	13	1.0	-----	6.2	202	168	0	0	3.0	.52
31	5.0	-----	4.8	1.1	-----	6.2	-----	89	-----	0	5.4	-----
TOTAL	132.80	31.89	166.42	91.25	746.5	1,160.9	542.7	356.91	65.45	0.96	21.95	257.99
MEAN	4.28	1.06	5.37	2.94	26.7	37.4	18.1	11.5	2.18	.031	.71	8.60
MAX	75	19	71	17	315	218	202	168	36	.75	12	88
MIN	0	.01	.02	.87	1.3	6.2	1.0	.02	0	0	0	0
CFSM	.24	.06	.30	.17	1.51	2.12	1.02	.65	.12	.002	.04	.49
IN.	.28	.07	.35	.19	1.57	2.44	1.14	.75	.14	.002	.05	.54
AC-FT	263	63	330	181	1,480	2,300	1,080	708	130	1.9	44	512

CAL YR 1969 TOTAL	MEAN	MAX	MIN	CFSM	IN	AC-FT
WTR YR 1970: TOTAL 3,575.72	MEAN 9.80	MAX 315	MIN 0	CFSM .55	IN 7.51	AC-FT 7,090

PEAK DISCHARGE (BASE 800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
2-24	2330	633.45	810	4-30	0900	633.75	1,020
3-16	2200	633.84	1,020	5-30	2100	634.08	1,140
4-25	1645	633.70	925	9-16	1915	633.60	900

TRINITY RIVER BASIN

08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex.

LOCATION.--Lat 32°41'08", long 97°19'44", Tarrant County, on right bank near entrance to culvert under Missouri, Kansas, and Texas Railroad Company Bridge, 0.2 mile northeast of intersection of Hemphill Street and Seminary Drive in Fort Worth, 1.8 miles upstream from mouth, and 4.5 miles south of Fort Worth City Hall.

DRAINAGE AREA.--0.97 sq mi.

PERIOD OF RECORD.--October 1969 to September 1970.

GAGE.--Water-stage recorder and culvert control. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 339 cfs Apr. 25 (elevation, 653.99 ft); no flow at times in July and August. Maximum stage since 1966, about 656.0 ft in August 1966 (discharge not determined), from information by local resident.

REMARKS.--Records fair. Low flow sustained by effluent from commercial establishments above station. One recording rain gage is operated in basin above station and one is located below station in Seminary South Shopping Center. Records of precipitation and hydrologic data for selected storms are published elsewhere in supplementary basic data reports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.05	.36	.09	8.3	.05	.17	.57	1.0	.01	.02	7.7
2	.01	.82	.32	1.2	.25	.25	.21	.47	.09	.01	.01	12
3	.01	.10	.26	.09	.10	4.9	.17	.35	.03	0	.02	.05
4	.01	.11	.29	.06	.05	.05	.10	.16	.02	0	.02	.02
5	.04	.02	2.2	2.3	.04	.06	.19	.17	.03	0	.01	.02
6	.02	.02	4.4	.15	.05	3.7	.11	.12	.02	0	.01	.02
7	.04	.02	.22	.11	.05	.67	.13	.10	.15	0	.01	.02
8	.02	.01	.07	.10	.04	.05	.16	.17	.02	0	.02	.02
9	.02	.02	.05	.08	.01	.02	.25	.18	.03	.27	.13	.02
10	.01	.02	.05	.08	.01	.28	.10	.15	.04	0	.01	.02
11	.01	.03	.03	.08	.01	2.8	.08	.10	.03	0	.02	.02
12	13	.03	.02	.05	.01	.35	.05	.12	.03	1.1	.04	.02
13	.12	.02	.02	.05	.02	.04	.06	.08	.04	.02	.05	2.9
14	.02	.04	.08	.05	.05	.07	.08	.09	.04	.05	.02	.04
15	.01	.02	.15	.05	2.6	.06	.27	.08	.02	.05	.08	.02
16	.01	.30	.01	.05	.05	6.9	1.8	.06	.01	.04	.02	16
17	.01	.91	.01	.04	.05	4.5	.08	.05	.01	.05	.06	2.0
18	.01	.03	.01	.04	.05	.41	7.1	.04	.04	.01	.05	.05
19	.01	.02	.01	.04	.04	.34	.10	.04	.05	.01	1.1	.19
20	.01	.21	.01	.04	.04	6.6	.08	.07	.04	0	.02	.02
21	.01	.02	.01	.04	.04	3.9	.05	.14	.04	.05	.01	.02
22	.01	.02	.03	.04	1.5	.52	.06	.11	.03	.07	.01	.13
23	.01	.02	.02	.08	1.8	.24	.05	.36	.05	.04	12	6.7
24	.22	.04	.03	.04	23	.25	.05	.37	.04	.02	.01	.05
25	.07	.02	.04	.02	3.0	.25	18	.06	.04	.02	0	.16
26	.08	.03	.04	.35	.19	.26	.44	.05	.04	.01	0	1.2
27	8.0	.59	.04	.02	.85	.19	.20	.25	.03	.01	0	.04
28	.55	.08	1.5	.04	1.8	.16	.12	1.9	.46	.01	0	.02
29	4.8	.49	6.7	.02	-----	.17	.03	.06	.12	.02	1.9	.02
30	2.2	.32	.25	.04	-----	.15	16	11	.01	.02	.06	.01
31	.08	-----	.14	.06	-----	.15	-----	.25	-----	.02	4.7	-----
TOTAL	29.43	4.43	17.37	5.50	44.00	38.34	46.29	17.72	2.60	1.91	20.41	49.50
MEAN	.95	.15	.56	.18	1.57	1.24	1.54	.57	.087	.062	.66	1.65
MAX	13	.91	6.7	2.3	.23	6.9	18	11	1.0	1.1	12	16
MIN	.01	.01	.01	.02	.01	.02	.03	.04	.01	0	0	.01
CFSM	.98	.15	.58	.18	1.62	1.28	1.59	.59	.09	.06	.68	1.70
IN.	1.13	.17	.67	.21	1.69	1.47	1.77	.68	.10	.07	.78	1.90
AC-FT	58	8.8	34	11	87	76	92	35	5.2	3.8	40	98

CAL YR 1969	TOTAL	-	MEAN	-	MAX	-	MIN	-	CFSM	-	IN	-	AC-FT	-
WTR YR 1970	TOTAL	277.50	MEAN	.76	MAX	23	MIN	0	CFSM	.78	IN	10.64	AC-FT	550

PEAK DISCHARGE (BASE 200 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-12	1730	652.43	207	5-30	0625	653.29	282
4-25	0545	652.73	216	5-30	1920	652.56	209
4-25	1455	653.99	339		about	about	
4-30	0730	653.91	331	8-23	0415	653.10	271
				9-16	1920	653.01	262

TRINITY RIVER BASIN

08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°14'18", long 97°19'11", Tarrant County, on left bank at culvert on downstream side of access road to Interstate Highway 35-W, 0.3 mile north of Seminary Drive, 1.2 miles upstream from mouth, and 4.3 miles south of Fort Worth City Hall.

DRAINAGE AREA.--1.35 sq mi.

PERIOD OF RECORD.--October 1969 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 336 cfs Apr. 25 (elevation, about 624.4 ft); minimum daily discharge, 0.01 cfs Aug. 2, 25, 26, 28.

Maximum elevation since 1969, 627.2 ft (backwater from culvert), from floodmarks, in May 1969 (discharge not determined). Flood in August 1966 probably equaled or exceeded the flood of May 1969, based on information at upstream station 08048530.

REMARKS.--Records fair. Records include runoff from a shopping center. Low flows sustained by effluents. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.18	.40	.12	11	.53	.21	.59	3.4	.06	.02	9.9
2	.02	1.3	.35	2.0	.23	.83	.23	.44	.25	.09	.01	13
3	.02	.25	.30	.12	.14	8.2	.19	.35	.16	.05	.11	.05
4	.02	.12	.32	.11	.14	.38	.19	.30	.12	.02	.04	.03
5	.03	.10	3.5	4.1	.14	.35	.19	.28	.12	.02	.06	.03
6	.03	.08	7.5	.17	.17	7.1	.17	.25	.12	.06	.06	.03
7	.03	.08	.30	.12	.17	2.3	.16	.23	.28	.06	.07	.02
8	.02	.07	.18	.09	.17	.62	.16	.25	.11	.04	.07	.02
9	.02	.07	.13	.08	.13	.59	.41	.23	.14	.17	.11	.03
10	.02	.06	.13	.08	.11	.62	.17	.19	.14	.06	.02	.04
11	.02	.06	.12	.08	.11	5.4	.14	.21	.14	.06	.07	.04
12	21	.05	.12	.08	.11	.87	.12	.19	.14	3.0	.07	.02
13	.20	.05	.12	.06	.12	.32	.12	.17	.19	.09	.07	6.0
14	.09	.05	.13	.06	.13	.35	.13	.17	.19	.07	.06	.05
15	.09	.05	.16	.05	5.5	.35	.69	.14	.23	.09	.08	.02
16	.09	.35	.08	.05	.16	9.6	2.7	.13	.13	.08	.04	26
17	.09	1.4	.09	.05	.13	6.4	.16	.13	.13	.09	.06	5.2
18	.09	.10	.08	.04	.14	.62	10	.13	.19	.04	.05	.21
19	.09	.08	.09	.04	.13	.62	.25	.14	.14	.02	1.4	.28
20	.09	.22	.09	.04	.14	8.2	.20	.14	.12	.07	.03	.12
21	.09	.10	.09	.04	.13	4.7	.15	.16	.08	.79	.04	.11
22	.09	.10	.11	.04	2.6	.75	.15	.14	.12	.11	.04	.41
23	.09	.10	.11	.05	3.0	.50	.15	.44	.14	.08	12	11
24	.30	.10	.12	.04	36	.41	.15	.87	.12	.07	.02	.17
25	.15	.10	.11	.04	4.3	.35	24	.12	.23	.11	.01	.79
26	.15	.10	.11	.41	.53	.30	1.3	.13	.19	.05	.01	3.6
27	13	.80	.11	.03	3.4	.28	.35	.79	.08	.09	.02	.14
28	.90	.20	3.2	.03	3.4	.25	.30	4.6	.38	.06	.01	.12
29	8.0	.60	12	.03	-----	.23	.25	.12	.23	.08	3.2	.12
30	2.5	.35	.28	.03	-----	.25	17	21	.07	.06	.05	.11
31	.20	-----	.16	.03	-----	.21	-----	.51	-----	.04	5.0	-----
TOTAL	47.55	7.27	30.59	8.31	72.43	62.48	60.39	33.54	8.08	5.78	22.90	77.66
MEAN	1.53	.74	.99	.27	2.59	2.02	2.01	1.08	.27	.19	.74	2.59
MAX	21	1.4	12	4.1	36	9.6	24	21	3.4	3.0	12	26
MIN	.02	.05	.08	.03	.11	.21	.12	.12	.07	.02	.01	.02
CFSM	1.14	.18	.73	.20	1.92	1.49	1.49	.80	.20	.14	.55	1.92
IN.	1.31	.20	.84	.23	2.00	1.72	1.66	.92	.22	.16	.63	2.14
AC-FT	94	14	61	16	144	124	120	67	16	11	45	154

CAL YR 1969	TOTAL	-	MEAN	-	MAX	-	MIN	-	CFSM	-	IN	-	AC-FT	-
WTR YR 1970:	TOTAL	436.98	MEAN	1.20	MAX	36	MIN	.01	CFSM	.89	IN	12.04	AC-FT	867

PEAK DISCHARGE (BASE 200 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-12	about	about	201	4-30	0735	about	324
	1730	622.15				624.20	
4-25	0550	622.41	217	5-30	0625	623.35	273
4-25	1500	about	336	5-30	1910	622.41	217
	624.40			8-23	0410	623.46	280
				9-16	1920	623.34	272
				9-23	0100	622.32	211

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS, WATER YEAR 1970

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
08048550	Dry Branch at Blandin Street, Fort Worth, Tex. <u>a/</u>	Lat 32°47'19", long 97°18'22", Tarrant County, at culvert on Blandin Street in north Fort Worth, 2.82 miles upstream from mouth.	1.08	1969-70	5-30-70	587.75	298
08048820	Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. <u>a/</u>	Lat 32°50'22", long 97°19'22", Tarrant County, at culvert on South access road to Interstate Highway 820, 5.7 miles north of courthouse, Fort Worth, and 7.55 miles upstream from mouth.	5.64	1969-70	4-25-70	613.00	650

a/ Equipped with stage recorder.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey - Water Resources Division
RAINFALL DATA SUMMARY 1970 WATER YEAR

SYCAMORE CREEK SYCAMORE CREEK TRIBUTARY DRY BRANCH LITTLE FOSSIL CREEL
RAIN GAGES

Date of storm	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF
Jan. 2, 1970			.21	.27	.13	0.21	0.17	0.19	0.20	0.21
5			.37	.29	.26	.30	.33	.37	.40	.38
6			.15	.01	.01	.02	.01	.02	.03	.02
January totals	--	--	.73	.57	.40	.53	.51	.58	.63	.61
Feb. 1, 1970	Installed	Feb. 5, 1970	1.10	1.15	0.85	.98	.96	1.01	.98	1.00
8	0.02	0.02	.02	.02	.02	0	0	.01	0	0
15	.59	.56	.42	.53	.37	.52	.47	.54	.46	.50
22	.37	.36	.32	.33	.30	.35	.30	.34	.35	.32
23	.34	.35	.36	.29	.26	.41	.32	.27	.34	.42
24	1.90	1.78	1.88	1.96	1.38	1.92	1.89	1.75	1.71	1.85
25	.02	.01	.02	.02	.03	.05	.01	.01	.01	.02
27	.35	.37	.39	.33	.19	.41	.30	.42	.45	.32
28	.06	.07	.06	.10	.09	.17	.22	.27	.25	.23
February totals	--	--	4.57	4.73	3.49	4.81	4.47	4.62	4.55	4.66
Mar. 2, 1970	.04	.08	.10	.11	.09	.15	.14	.11	.04	.09
3	.42	.55	.50	.53	.55	.61	.41	.42	.48	.64
6	.60	.60	.55	.61	.34	.73	.63	.62	.71	.71
7	.07	.07	.07	.10	.04	.03	.05	.02	.02	.02
10	.30	.28	.15	.19	.10	.13	.10	.11	.10	.10
11	.33	.31	.35	.18	.10	.30	.34	.14	.18	.27
12	.01	.01	.02	.02	.02	.04	.02	.12	.05	.05
16	1.21	1.25	.85	1.00	.67	.48	.37	.35	.40	.43
17	.14	.18	.19	.15	.12	.19	.22	.16	.22	.19
20	.51	.62	.60	.61	.45	.59	.62	.46	.56	.59
21	.40	.29	.20	.34	.05	.29	.32	.40	.31	.22
March totals	4.03	4.24	3.58	4.01	2.61	3.54	3.22	2.91	3.01	3.31

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey - Water Resources Division

RAINFALL DATA SUMMARY 1970 WATER YEAR

SYCAMORE CREEK

SYCAMORE CREEK TRIBUTARY

DRY BRANCH

SYCAMORE CREEK

RAIN GAGES

Date of storm	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF
Apr. 1, 1970	0	0.02	0	(0.02)	0	0	0	0.02	0.01	0
9	.10	.11	.06	.07	.05	.11	.06	.21	.22	.14
10	.01	.01	.01	0	0	0	0	0	0	0
15	.04	.06	.03	.06	.11	.06	.02	.25	.34	.15
16	.26	.26	.21	.33	.26	.15	.31	.27	.17	.13
17	0	0	0	0	0	.02	.01	.03	.04	.01
18	.60	.48	.57	.79	.69	1.10	.81	.66	.60	1.11
23	0	0	0	0	0	.13	.15	0	0	.05
25	1.75	1.83	1.78	2.01	1.50	1.92	1.96	2.24	2.25	2.10
30	1.15	1.23	1.18	1.27	1.18	1.70	1.35	1.48	1.80	1.60
April totals	3.91	4.00	3.84	4.55	3.79	5.19	4.67	5.16	5.43	5.29
May 4, 1970	0	.02	0	.02	0	0	0	0	0	0
15	0	0	0	0	0	.01	0	.01	.01	.01
22	.40	.45	0	(.01)	(.01)	.01	0	.02	.01	.01
23	.33	.23	.08	(.08)	.06	.24	.03	.13	.37	.09
24	.34	.61	.20	(.17)	.10	.11	.14	.06	.03	.02
25	0	0	0	0	0	0	0	0	0	.01
26	0	.03	.01	.01	.02	.15	.81	.05	.02	.03
27	.14	.06	.08	(.06)	.07	.38	.35	.20	.23	.23
28	.63	.71	.60	.54	.54	.35	.40	.40	.37	.33
30	2.15	1.97	1.60	2.33	1.80	2.76	2.75	1.67	1.54	2.38
31	.01	.02	.01	.01	.01	.01	.02	.02	.02	.01
May totals	4.00	4.03	2.58	3.40	2.61	4.02	4.50	2.56	2.60	3.12
June 1, 1970	.06	.38	.12	.24	.25	0	0	0	0	0
2	(.02)	.03	.02	.05	.03	0	0	0	0	0
3	0	0	0	0	0	.05	(.01)	.04	.04	.01
12	0	.01	0	.02	0	.06	.01	.04	.04	.05
23	0	.01	.02	0	0	(.01)	.01	.49	.02	0
June totals	.08	.43	.16	.31	.28	.12	.03	.57	.10	.06

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey - Water Resources Division
RAINFALL DATA SUMMARY 1970 WATER YEAR

SYCAMORE CREEK		SYCAMORE CREEK TRIBUTARY				DRY BRANCH		LITTLE FOSSIL CREEK			
		RAIN GAGES									
Date of storm		1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF
July 12, 1970		0.45	0.45	0.40	0.44	0.40	0.52	0.52	0.60	0.60	0.58
24		.15	0	0	.03	.01	0	0	0	0	0
July totals		.60	.45	.40	.47	.41	.52	.52	.60	.60	.58
Aug. 8, 1970		.02	.01	0	0	.01	0	0	0	0	0
16		0	0	0	0	0	.01	0	.41	.19	.01
19		(.36)	.27	.02	.34	.19	.26	.23	.25	.28	.35
20		0	0	0	0	0	0	0	.03	.04	0
22		0	0	0	0	0	0	0	.02	0	0
23		(.53)	.40	.60	1.45	1.27	.70	.46	.95	.85	.52
29		.17	.16	.40	.37	.33	.40	.65	.28	.20	.19
31		.35	.55	.48	.48	.42	.31	.17	.32	.34	.42
August totals		1.43	1.39	1.50	2.64	2.22	1.68	1.51	2.26	1.90	1.49
Sept. 1, 1970		1.04	.95	.89	.92	.85	.94	.96	.97	.75	.69
2		.98	1.05	.95	.95	.88	.92	1.10	.62	.73	.82
13		.03	.26	.65	.44	.70	.72	.59	.18	.49	.71
16		1.33	1.57	1.88	2.43	1.65	3.28	3.11	3.25	3.53	3.05
17		0	.02	.01	.34	.30	.81	.64	1.00	1.11	1.11
19		0	.21	.09	.12	.03	0	0	0	0	0
21		.05	.04	.05	(.05)	.04	.01	0	.02	.03	.02
22		.10	.14	.23	(.10)	.08	.05	.05	.19	.12	.05
23		1.22	1.04	.79	(1.33)	1.03	1.23	1.40	1.11	1.09	1.13
25		.97	.49	(.28)	(.12)	.10	.18	.15	.16	.13	.13
26		.34	.34	(.20)	(.12)	.10	.27	.33	.15	.20	.26
September totals		6.06	6.11	6.02	6.92	5.76	8.41	8.33	7.65	8.18	7.97
1970 Wat Yr totals		--	--	--	--	--	36.89	35.84	35.67	35.84	34.71

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey - Water Resources Division
RAINFALL DATA SUMMARY 1970 WATER YEAR

SYCAMORE CREEK			SYCAMORE CREEK TRIBUTARY			DRY BRANCH		LITTLE FOSSIL CREEK			
RAIN GAGES											
Date of storm	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF	
Oct. 4, 1969	--	--	--	--	--	0.02	0.02	0.06	0.05	0.03	
5	--	--	--	--	--	.02	.04	.02	.02	.02	
12	--	--	--	--	--	2.50	2.73	2.72	2.60	2.29	
24	--	--	--	--	--	.01	0	.02	.03	.01	
27	--	--	--	--	--	1.37	1.38	1.07	1.32	1.12	
28	--	--	--	--	--	.19	.18	.17	.15	.15	
29	--	--	--	--	--	.36	.40	.29	.32	.33	
30	--	--	--	--	--	.03	.21	.01	.04	.03	
October totals	--	--	--	--	--	4.50	4.96	4.36	4.53	3.98	
Nov. 2, 1969	--	--	--	--	--	.22	(.04)	.26	.23	.16	
3	--	--	--	--	--	.03	0	.03	.06	.06	
4	--	--	--	--	--	.09	(.03)	.13	.14	.17	
10	--	Installed Nov. 13, 1969	--	--	--	.03	(.01)	.05	.03	.02	
16	--	0.10	--	--	--	.12	.08	.08	.12	.12	
17	--	.50	--	Installed Nov. 21, 1969	--	.01	.01	.01	.01	.01	
24	--	0	--	0.02	0.01	0	0	0	0	0	
26	--	.02	--	.01	.01	.02	(.01)	.02	.03	.01	
27	--	.20	--	.24	.10	.23	.22	.20	.21	.21	
November totals	--	--	--	--	--	.75	.40	.78	.83	.76	
Dec. 4, 1969	--	--	0	.02	.01	0	0	0	0	0	
5	--	--	.49	.48	.44	.52	.55	.55	.59	.55	
6	--	--	.73	.78	.40	.67	.71	.62	.61	.60	
28	--	--	.29	.17	.49	.49	.48	.81	.66	.45	
29	--	--	.90	1.07	.46	1.14	.98	1.64	1.62	1.28	
December totals	--	--	2.41	2.84	1.48	2.82	2.72	3.62	3.48	2.88	
1969 Cal Yr totals	--	--	--	--	--	--	--	--	--	--	

1970 WATER YEAR									
STATION	DATE	TIME	PRECIP.	TEMP.	WIND	H. P.	CLOUDS	DISCHARGE IN	ACCUM. DISCHARGE IN
1000	10-10	10-10	0.0	1.0	0.0	0.0	0.0	0.0	0.0
1001	10-11	10-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1002	10-12	10-12	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1003	10-13	10-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1004	10-14	10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1005	10-15	10-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1006	10-16	10-16	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1007	10-17	10-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1008	10-18	10-18	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1009	10-19	10-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1010	10-20	10-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1011	10-21	10-21	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1012	10-22	10-22	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1013	10-23	10-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1014	10-24	10-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1015	10-25	10-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1016	10-26	10-26	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1017	10-27	10-27	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1018	10-28	10-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1019	10-29	10-29	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1020	10-30	10-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1021	10-31	10-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1022	10-32	10-32	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1023	10-33	10-33	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1024	10-34	10-34	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1025	10-35	10-35	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1026	10-36	10-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1027	10-37	10-37	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1028	10-38	10-38	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1029	10-39	10-39	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1030	10-40	10-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1031	10-41	10-41	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1032	10-42	10-42	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1033	10-43	10-43	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1034	10-44	10-44	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1035	10-45	10-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1036	10-46	10-46	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1037	10-47	10-47	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1038	10-48	10-48	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1039	10-49	10-49	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1040	10-50	10-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1041	10-51	10-51	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1042	10-52	10-52	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1043	10-53	10-53	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1044	10-54	10-54	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1045	10-55	10-55	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1046	10-56	10-56	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1047	10-57	10-57	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1048	10-58	10-58	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1049	10-59	10-59	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1050	10-60	10-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1051	10-61	10-61	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1052	10-62	10-62	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1053	10-63	10-63	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1054	10-64	10-64	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1055	10-65	10-65	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1056	10-66	10-66	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1057	10-67	10-67	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1058	10-68	10-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1059	10-69	10-69	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1060	10-70	10-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1061	10-71	10-71	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1062	10-72	10-72	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1063	10-73	10-73	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1064	10-74	10-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1065	10-75	10-75	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1066	10-76	10-76	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1067	10-77	10-77	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1068	10-78	10-78	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1069	10-79	10-79	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1070	10-80	10-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1071	10-81	10-81	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1072	10-82	10-82	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1073	10-83	10-83	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1074	10-84	10-84	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1075	10-85	10-85	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1076	10-86	10-86	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1077	10-87	10-87	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1078	10-88	10-88	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1079	10-89	10-89	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1080	10-90	10-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1081	10-91	10-91	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1082	10-92	10-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1083	10-93	10-93	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1084	10-94	10-94	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1085	10-95	10-95	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1086	10-96	10-96	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1087	10-97	10-97	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1088	10-98	10-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1089	10-99	10-99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1090	10-100	10-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0

STORM RAINFALL AND RUNOFF RECORD									
1970 WATER YEAR									
APRIL 30-MAY 1, 1970									
STATION, STATION, STATION, STATION, STATION, STATION, STATION, STATION, STATION, STATION									
GAGE NUMBER									
PRECIP.									
IN.									
CFS									
IN.									
ACCUM.									
RUNOFF									
IN.									
IN.									
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0009
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0018
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0020
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0027
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0041
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0092
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0198
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0423
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0683
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1142
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1841
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2562
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3261
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3816
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3982
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4325
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4517
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4584
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4656
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4761
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4870
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4975
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5131
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5390
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5614
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5779
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5837
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5915
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6092
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6236
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6297

1970 WATER YEAR

SEPT. 16-17, 1970

DISCHARGE! ACCUM.

REPORT

IN.

0.01

0.04

0.16

0.51

0.90

1.65

2.19

2.54

2.72

2.96

3.08 €

3.17

3.29

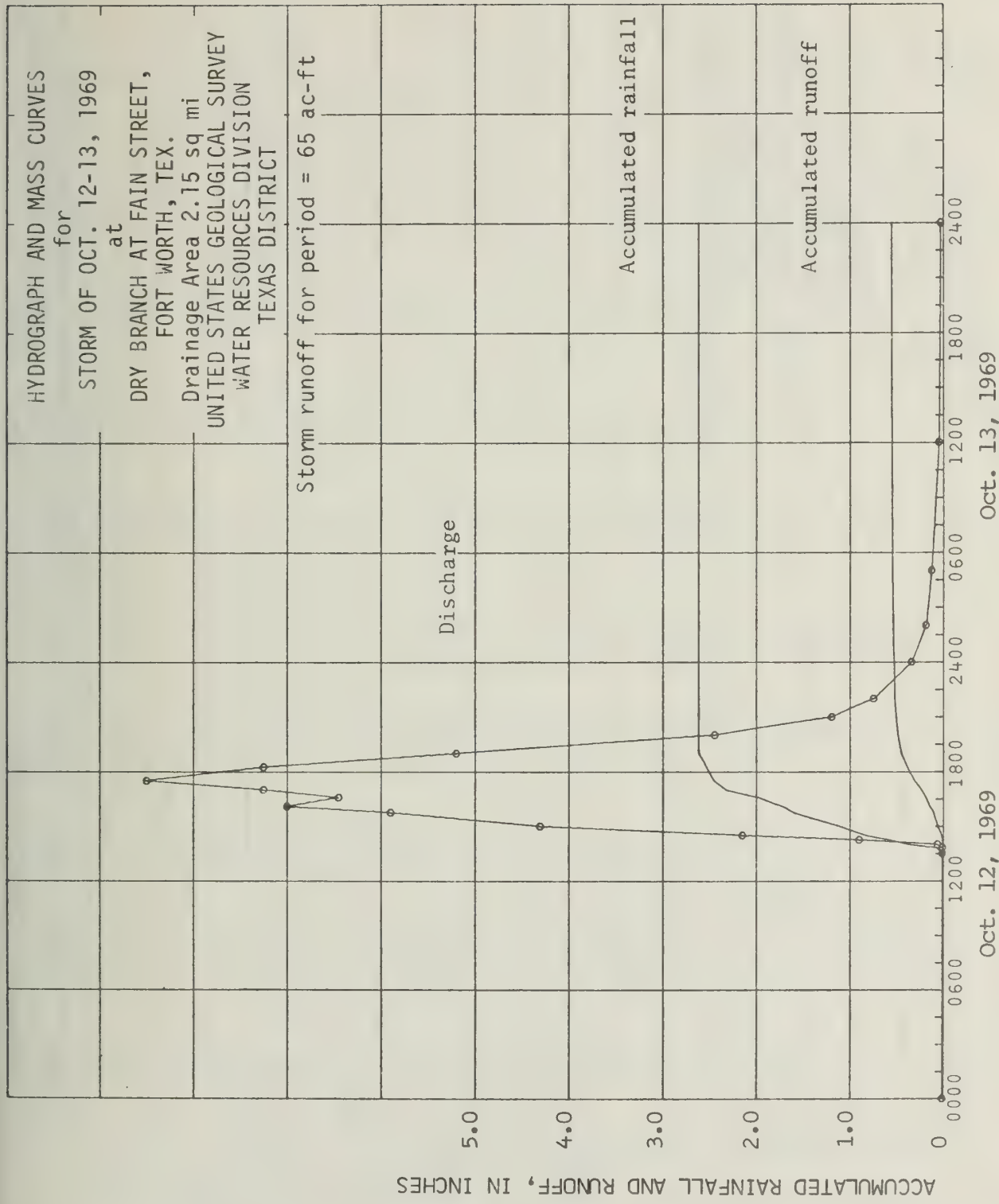
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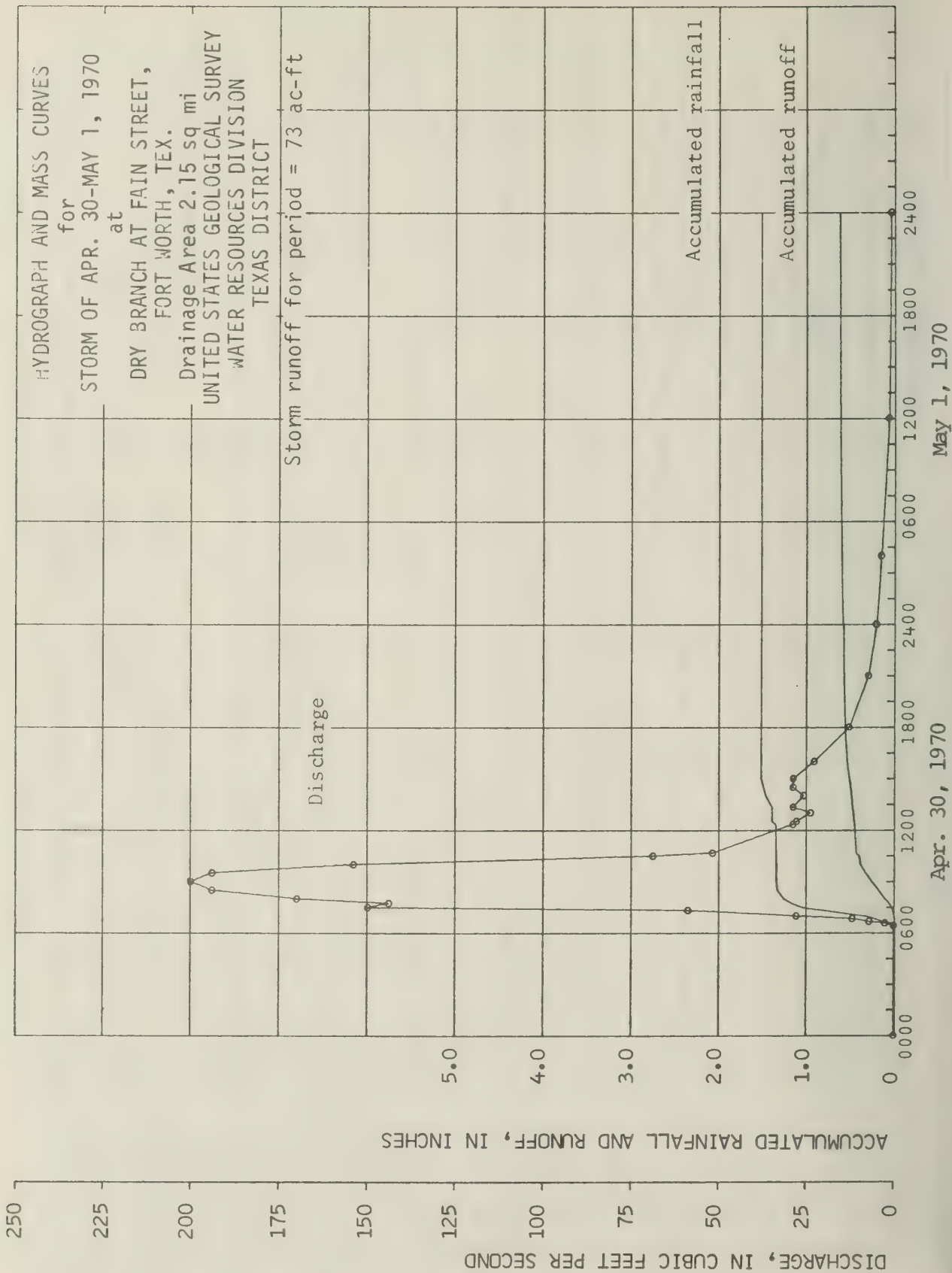
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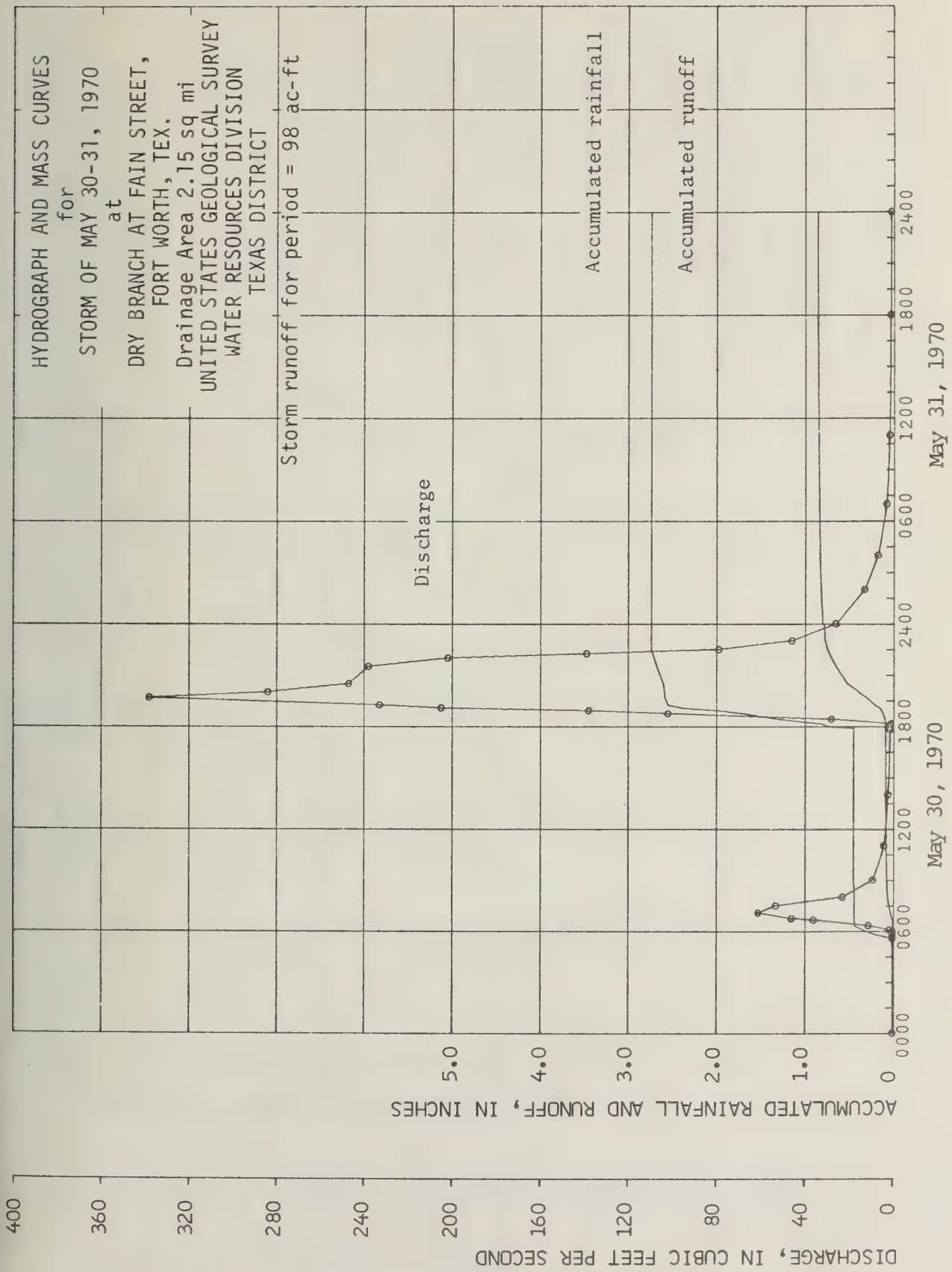
3.76

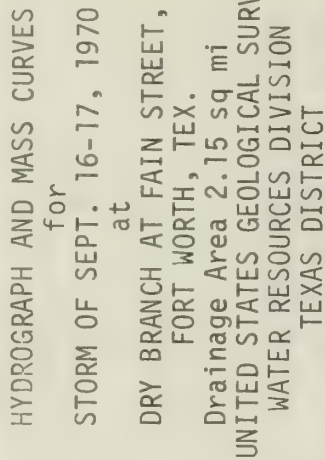
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3.87





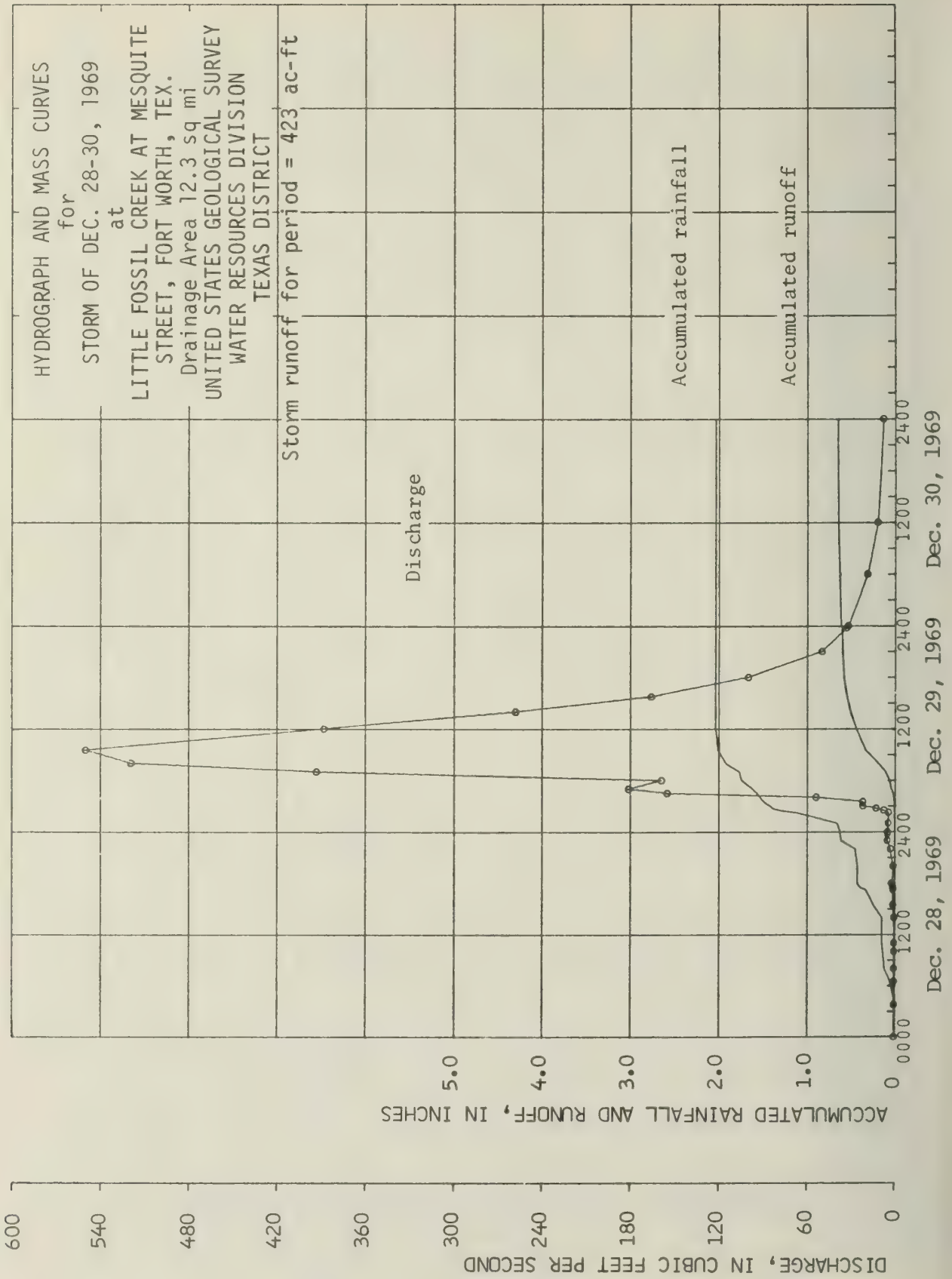


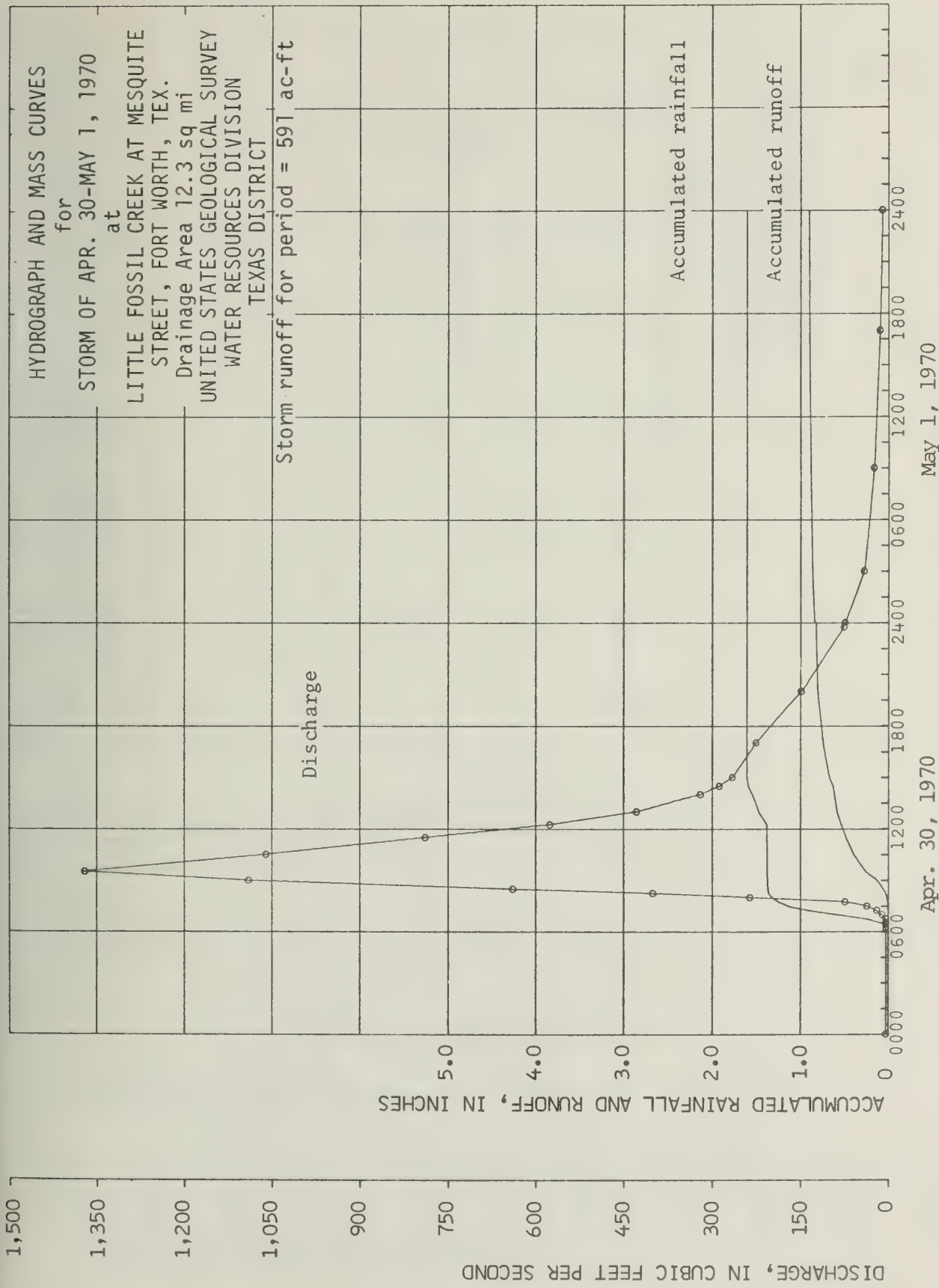


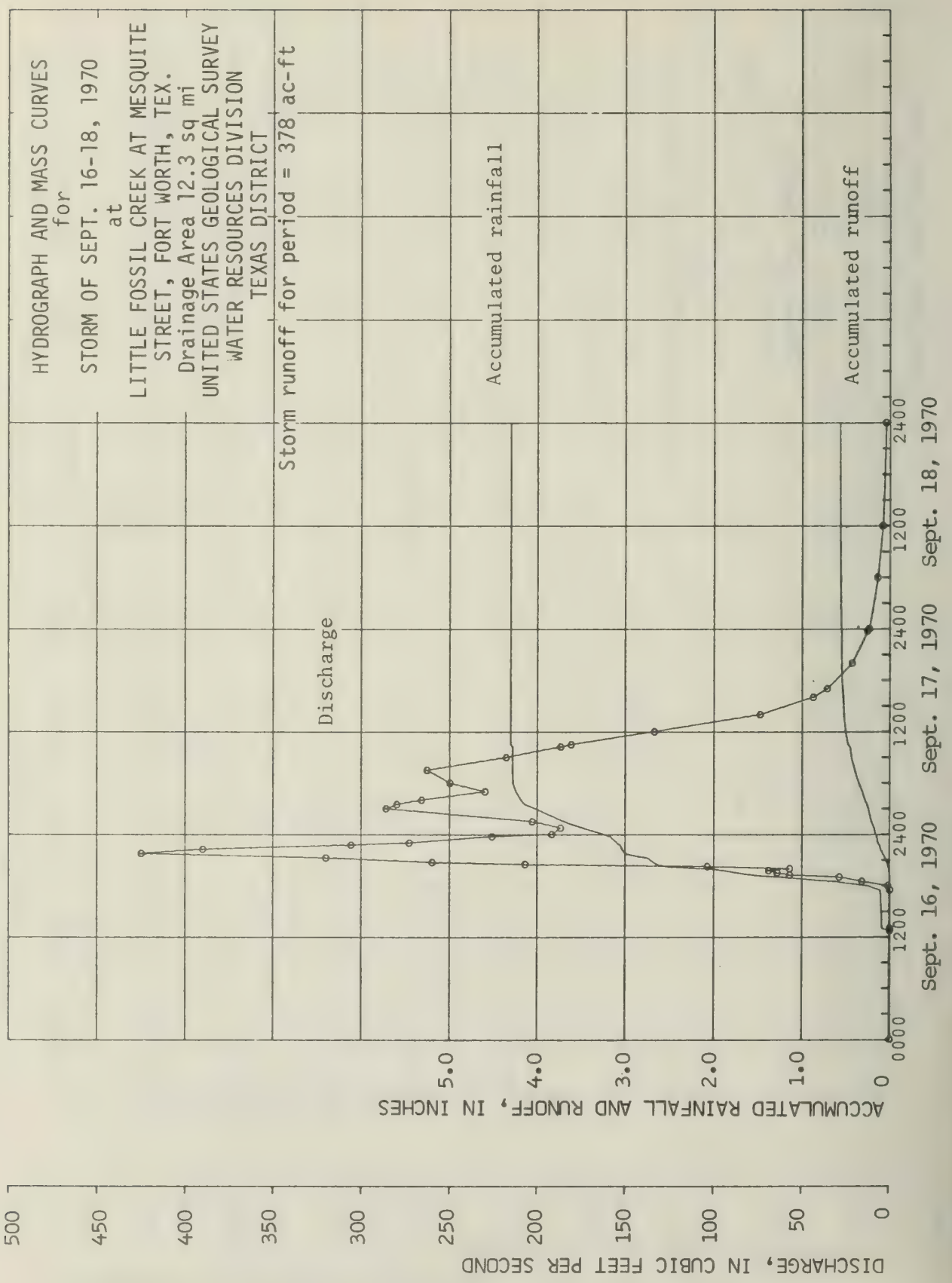
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 03-046.50					1970 WATER YEAR				
LITTLE POSSIL CREEK AT MESQUITE ST., FT. WORTH, TEX.					DEC. 28-30, 1969				
DATE & TIME	1-LE	2-LE	3-LE	G A F	W E I G H T E D P R E C I P .	DISCHARGE IN	ACCUM. RUNOFF		
					IN.	CFS	IN.		
DEC. 28									
0000	0.0	0.0	0.0				0.0	0.6	0.0001
0345	0.0	0.0	0.0				0.0	0.6	0.0004
0630	0.05	0.06	0.05				0.06	0.6	0.0005
0915	0.14	0.15	0.09				0.12	0.6	0.0005
1000	0.16	0.16	0.11				0.14	0.6	0.0004
1100	0.17	0.17	0.12				0.15	0.6	0.0009
1400	0.17	0.17	0.12				0.15	0.6	0.0009
1630	0.30	0.26	0.20				0.15	0.6	0.0011
1715	0.45	0.35	0.23				0.25	1.4	0.0014
1730	0.53	0.38	0.27				0.33	1.4	0.0016
1800	0.55	0.45	0.25				0.40	1.4	0.0016
2000	0.59	0.45	0.29				0.43	2.2	0.0020
2200	0.60	0.47	0.33				0.43	1.3	0.0023
2300	0.80	0.55	0.44				0.46	3.1	0.0029
2345	0.81	0.66	0.45				0.61	5.4	0.0035
2400	0.81	0.66	0.45				0.62	5.1	0.0038
DEC. 29							0.62	5.1	0.0039
0000	0.81	0.66	0.45				0.62	5.1	0.0042
0100	0.34	0.65	0.42				0.66	4.8	0.0049
0215	1.56	1.13	0.75				1.12	4.5	0.0053
0230	1.72	1.06	0.98				1.30	7.7	0.0056
0245	1.78	1.30	1.11				1.39	13.0	0.0060
0300	1.81	1.35	1.13				1.42	22.0	0.0070
0320	1.83	1.43	1.20				1.49	22.0	0.0084
0400	1.93	1.47	1.24				1.53	54.0	0.0113
0430	1.96	1.50	1.28				1.57	155.0	0.0216
0500	2.02	1.55	1.32				1.62	191.0	0.0387
0600	2.15	1.58	1.43				1.62	191.0	0.0387
0700	2.10	1.71	1.45				1.74	159.0	0.0587
0800	2.35	1.86	1.60				1.77	393.0	0.1082
0900	2.45	1.95	1.68				1.92	519.0	0.1899
1000	2.45	1.98	1.73				2.01	550.0	0.3285
1200	2.45	1.98	1.73				2.04	348.0	0.4385
1400	2.45	1.98	1.73				2.04	258.0	0.4994
1545	2.45	1.98	1.73				2.04	166.0	0.5413
1800	2.45	1.98	1.73				2.04	100.0	0.5743
2100	2.45	1.98	1.73				2.04	50.0	0.5925
2345	2.45	1.98	1.73				2.04	33.0	0.5987
2400	2.45	1.98	1.73				2.04	32.0	0.5992
DEC. 30									
0000	2.45	1.98	1.73				2.04	32.0	0.6113
0630	2.45	1.98	1.73				2.04	19.0	0.6257

STATION NO. 03-0483.50									
STORM RAINFALL AND RUNOFF RECORD									
LITTLE ROCK CREEK AT W-SQUITE ST., FT WORTH, TEX.									
APRIL 30 - MAY 1, 1970									
DATE & TIME	G A U G E					DISCHARGE		ACCUM.	
	1-1-E	2-1-E	3-1-E	4-1-E	5-1-E	IN	CFS	WEIGHTED PRECIP.	IN. RUNOFF
APR. 30									
0000	0.0	0.0	0.0					0.0	0.0018
0100	0.0	0.0	0.0					0.0	0.0036
0200	0.04	0.0	0.0					0.08	0.0038
0300	0.43	0.35	0.3					0.24	0.0039
0400	0.45	0.63	0.23					0.56	0.0042
0500	0.06	1.04	0.09					0.90	0.0049
0600	1.14	1.24	1.32					1.13	0.0060
0700	1.17	1.24	1.24					1.25	0.0084
0800	1.20	1.54	1.24					1.32	0.0158
0900	1.20	1.54	1.39					1.36	0.0284
1000	1.20	1.55	1.40					1.37	0.0586
1100	1.20	1.55	1.41					1.37	0.1273
1200	1.20	1.55	1.41					1.38	0.2567
1300	1.20	1.57	1.41					1.38	0.3903
1400	1.20	1.57	1.41					1.38	0.4771
1500	1.20	1.57	1.41					1.38	0.5316
1600	1.20	1.57	1.41					1.47	0.5787
1700	1.42	1.73	1.54					1.55	0.6080
1800	1.47	1.72	1.54					1.59	0.6271
1900	1.49	1.72	1.60					1.61	0.6690
2000	1.44	1.80	1.60					1.61	0.7402
2100	1.44	1.80	1.60					1.61	0.8035
2200	1.44	1.80	1.60					1.61	0.9227
2300	1.44	1.80	1.60					1.61	0.9227
2400	1.44	1.80	1.60					1.61	0.9239
MAY 1									
0000	1.44	1.80	1.60					1.61	0.9378
0100	1.44	1.80	1.60					1.61	0.9617
0200	1.44	1.80	1.60					1.61	0.9837
0300	1.44	1.80	1.60					1.61	0.9976
0400	1.44	1.80	1.60					1.61	0.9027

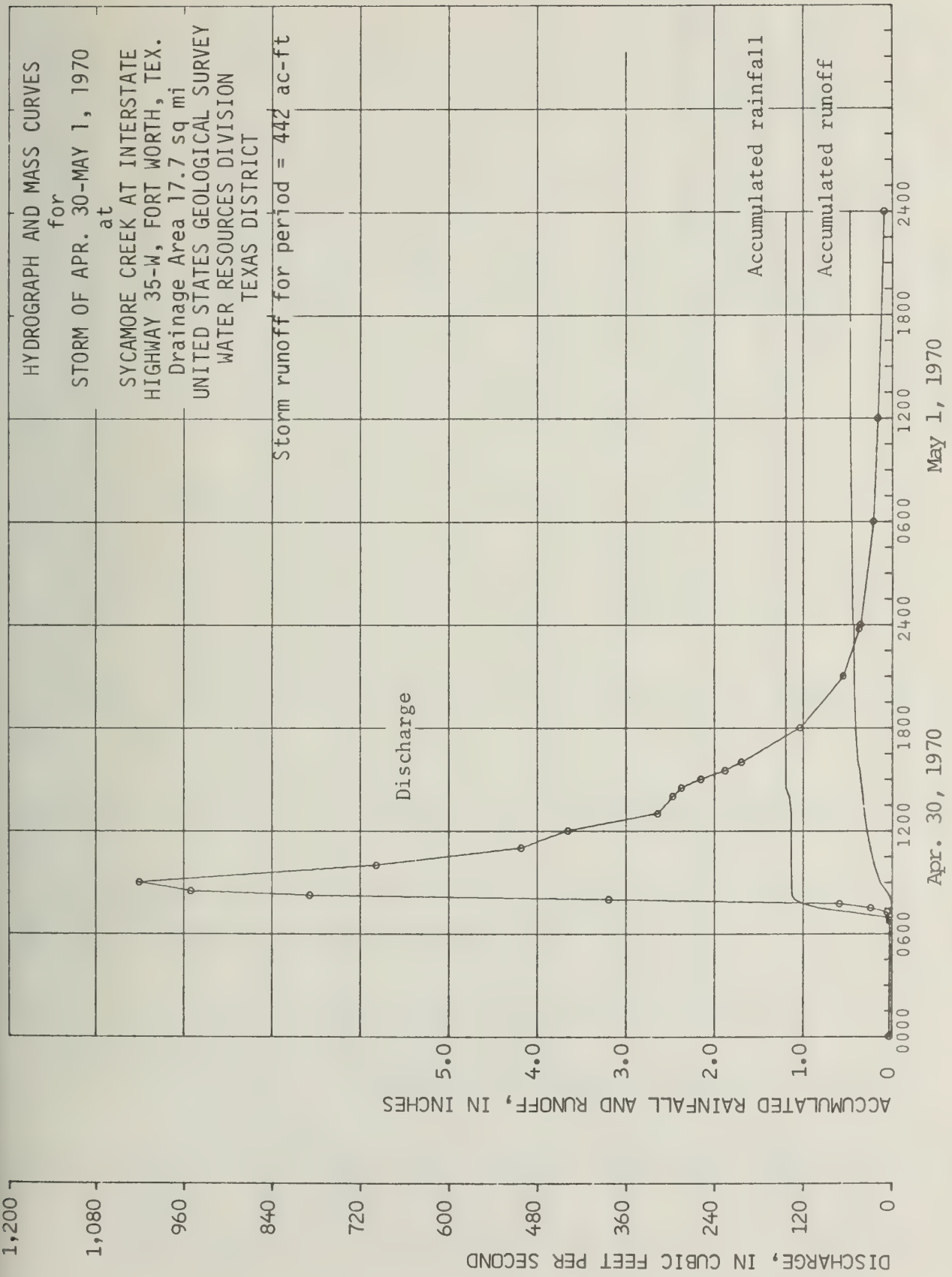
-40-

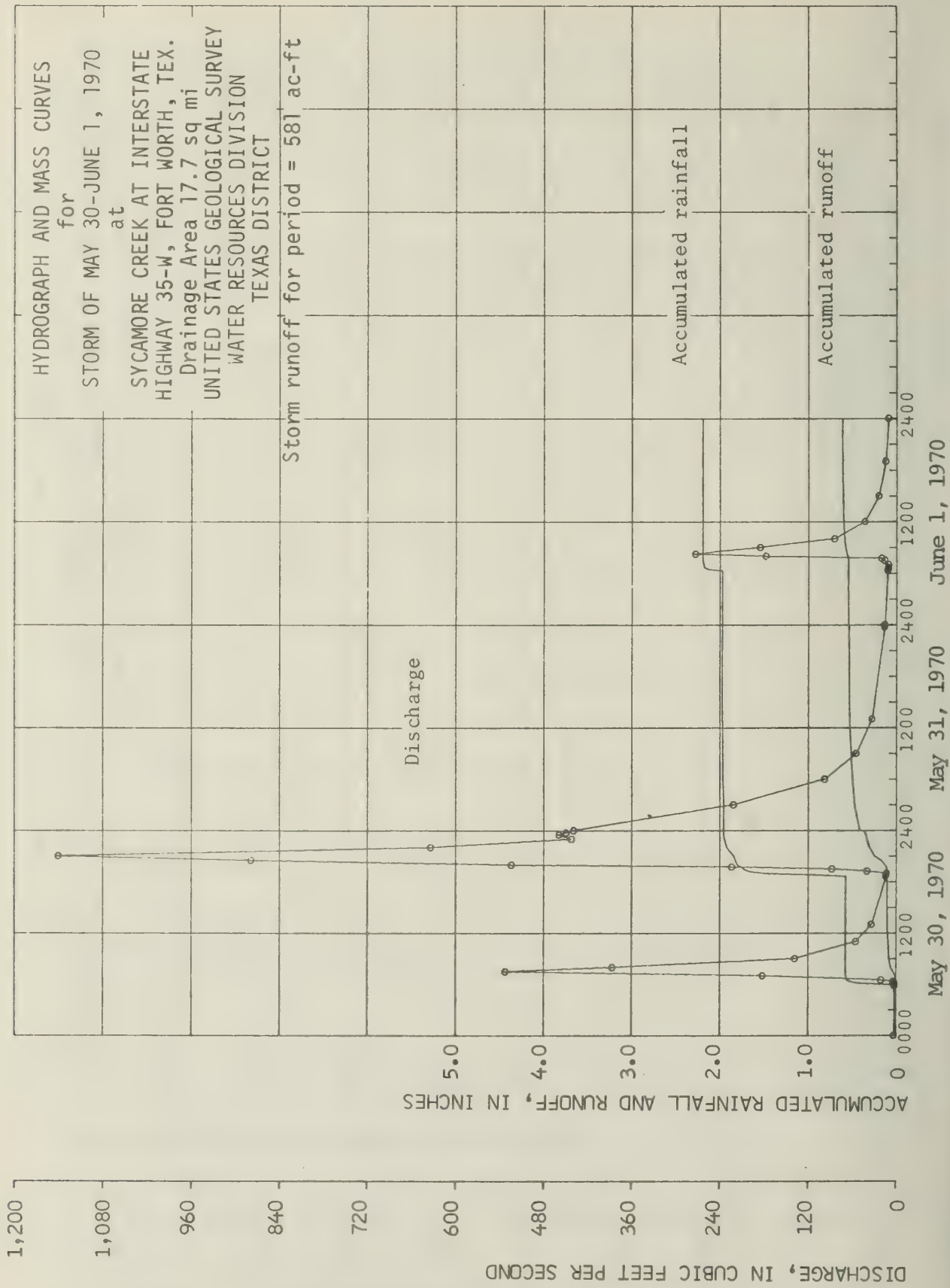


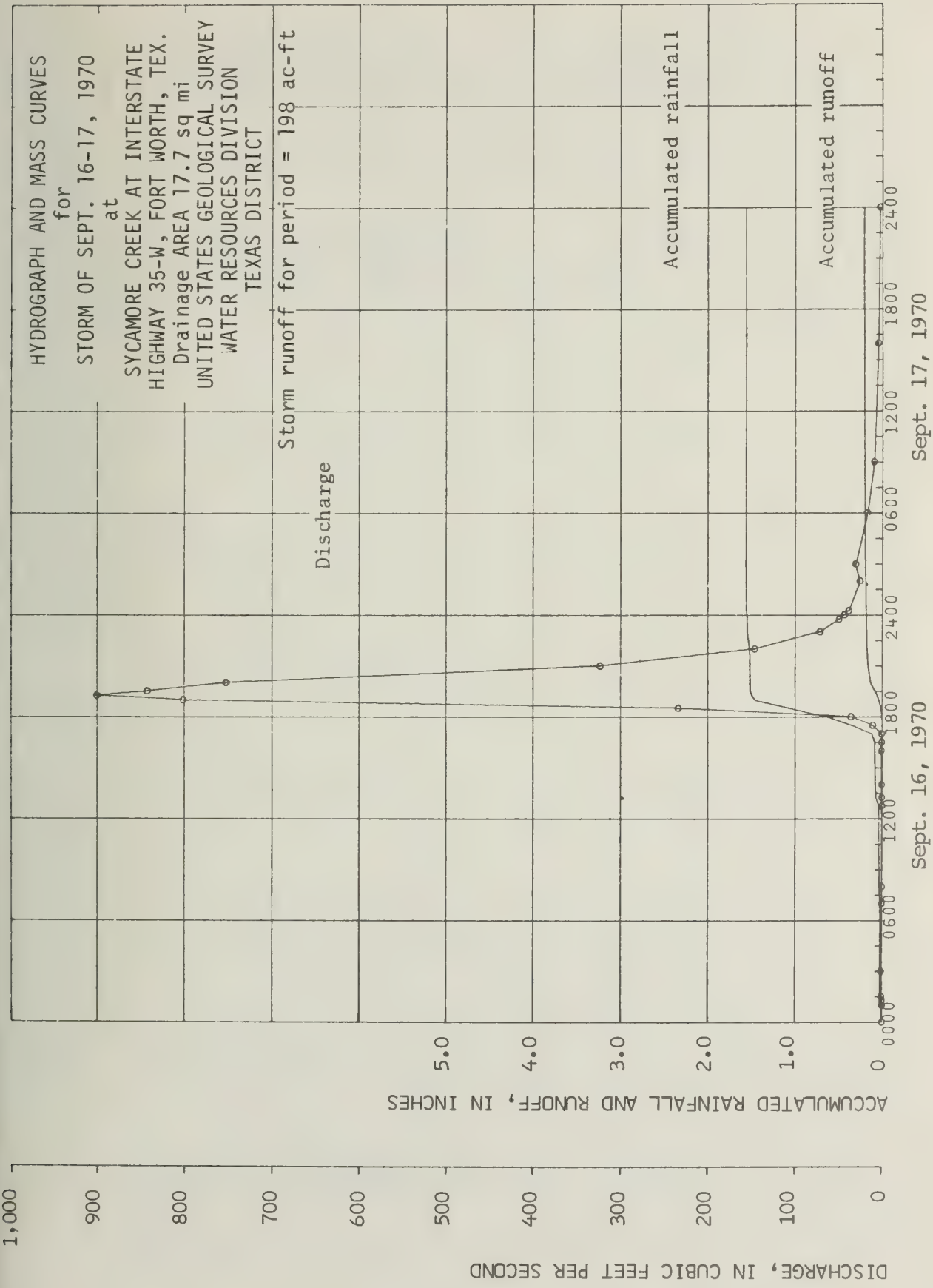




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STATION - 010									
1970 WATER YEAR									
SYCAMON CREEK AND CEM. S. 100. CENTER, ET WORTH, TEX.									
APRIL 25-26, 1970									
DATE	TIME	1-5T	1-5T	5-10T	10-15T	15-20T	20-25T	25-30T	30-35T
ADG.	IN.	PRECIP.	IN.	PRECIP.	IN.	PRECIP.	IN.	PRECIP.	IN.
0000	0.0		0.0				0.0		0.0000
0045	0.0		0.0				0.0		0.0001
0050	0.0		0.0				0.1		0.0003
0055	0.10		0.10				0.17		0.0003
0100	0.20		0.14				0.21		0.0027
0105	0.25		0.24				0.26		0.0170
0110	0.40		0.40				0.44		0.0445
0115	0.50		0.50				0.40		0.0733
0120	0.5		0.3				0.55		0.1100
0125	0.40		0.45				0.50		0.1423
0130	0.35		0.63				0.60		0.1571
0135	0.40		0.6				0.62		0.1647
0140	0.5		0.60				0.62		0.1607
0145	0.70		0.50				0.62		0.1713
0150	0.75		0.52				0.66		0.1747
0155	0.70		0.57				0.72		0.1703
0200	0.75		0.64				0.91		0.1905
0205	0.80		0.67				0.93		0.2170
0210	0.80		0.7				0.95		0.2304
0215	0.80		0.7				0.85		0.2305
0220	0.80		0.7				0.85		0.2417
0225	0.80		0.7				0.85		0.2427
0230	0.80		0.7				0.85		0.2428
0235	0.80		0.7				0.85		0.2429
0240	0.80		0.7				0.85		0.2429
0245	0.80		0.7				0.85		0.2429
0250	0.80		0.7				0.85		0.2429
0255	0.80		0.7				0.85		0.2429
0300	0.80		0.7				0.85		0.2429
0305	0.80		0.7				0.85		0.2429
0310	0.80		0.7				0.85		0.2429
0315	0.80		0.7				0.85		0.2429
0320	0.80		0.7				0.85		0.2429
0325	0.80		0.7				0.85		0.2429
0330	0.80		0.7				0.85		0.2429
0335	0.80		0.7				0.85		0.2429
0340	0.80		0.7				0.85		0.2429
0345	0.80		0.7				0.85		0.2429
0350	0.80		0.7				0.85		0.2429
0355	0.80		0.7				0.85		0.2429
0400	0.80		0.7				0.85		0.2429
0405	0.80		0.7				0.85		0.2429
0410	0.80		0.7				0.85		0.2429
0415	0.80		0.7				0.85		0.2429
0420	0.80		0.7				0.85		0.2429
0425	0.80		0.7				0.85		0.2429
0430	0.80		0.7				0.85		0.2429
0435	0.80		0.7				0.85		0.2429
0440	0.80		0.7				0.85		0.2429
0445	0.80		0.7				0.85		0.2429
0450	0.80		0.7				0.85		0.2429
0455	0.80		0.7				0.85		0.2429
0500	0.80		0.7				0.85		0.2429

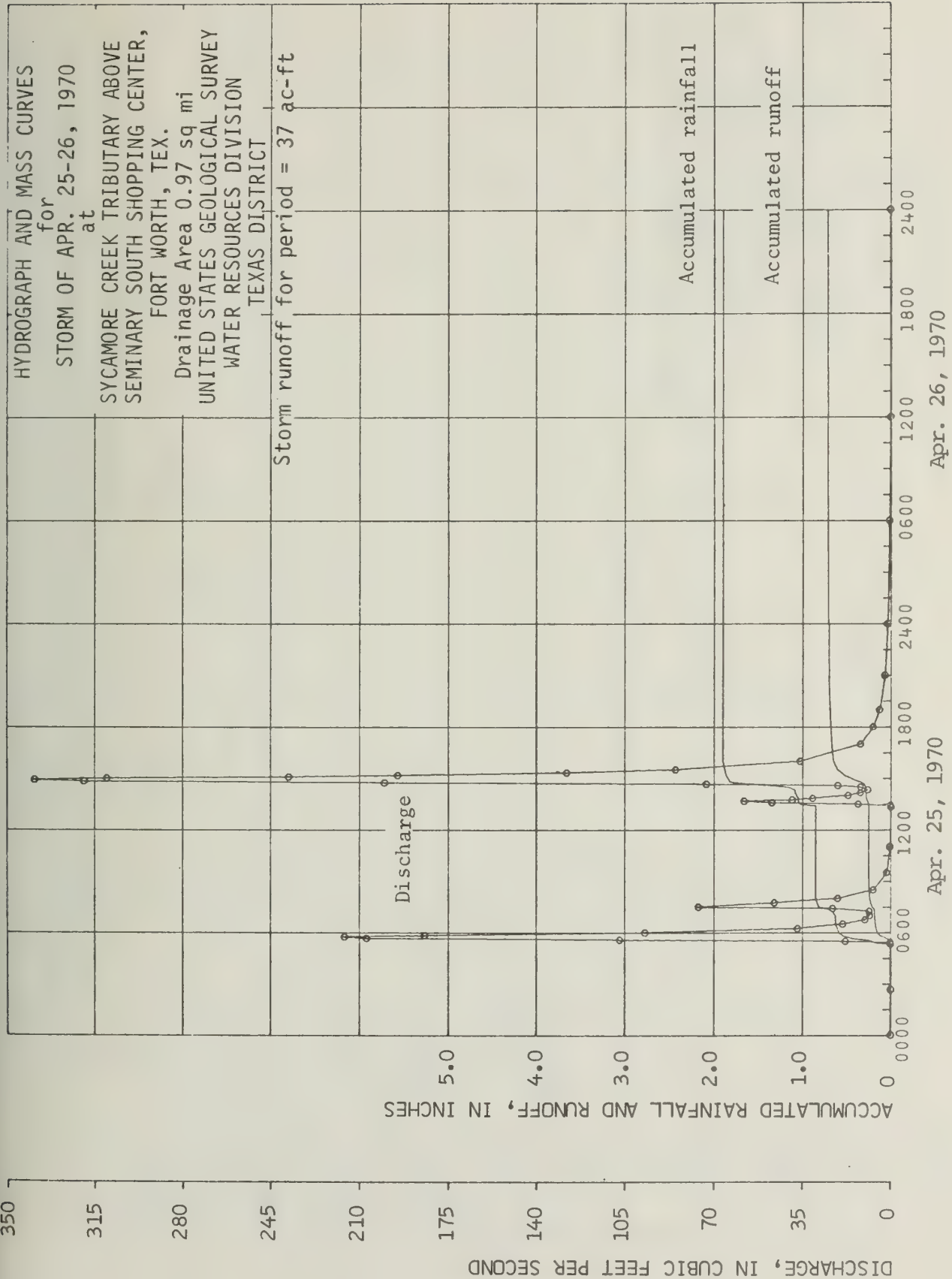
STATION 05-0433-20									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMON CREEK TRIBUTARY S. S. SHED, CENTER, ET WORTH, TEX.									
APRIL 25-26, 1970									
DATE & TIME	1-5T	2-5T	3-5T	4-5T	5-5T	6-5T	7-5T	1970 WATER YEAR	IN.
								DISCHARGE	
								ACCUM. WEIGHTED PRECIP. IN.	ACCUM. RUNOFF CFS
APR. 25									
1805	1.87	1.46						1.85	238.0
1810	1.37	1.47						1.86	0.5210
1820	1.33	1.47						1.87	0.5551
1830	1.23	1.44						1.88	0.6004
1840	2.01	1.40						1.90	0.6435
1700	2.01	1.50						1.90	0.6627
1800	2.01	1.50						1.90	12.0
1800	2.01	1.50						1.90	6.9
1800	2.01	1.50						1.90	4.4
2100	2.01	1.50						1.90	0.6842
2400	2.01	1.50						1.90	2.3
APR. 26								1.90	1.3
0000	2.01	1.50						1.90	1.3
0600	2.01	1.50						1.90	0.6
1200	2.01	1.50						1.90	0.2
2400	2.01	1.50						1.90	0.2
									0.4821
									0.5210
									0.5551
									0.6004
									0.6435
									0.6627
									0.6737
									0.6842
									0.6934
									0.6965
									0.7028
									0.7092
									0.7114
									0.7135

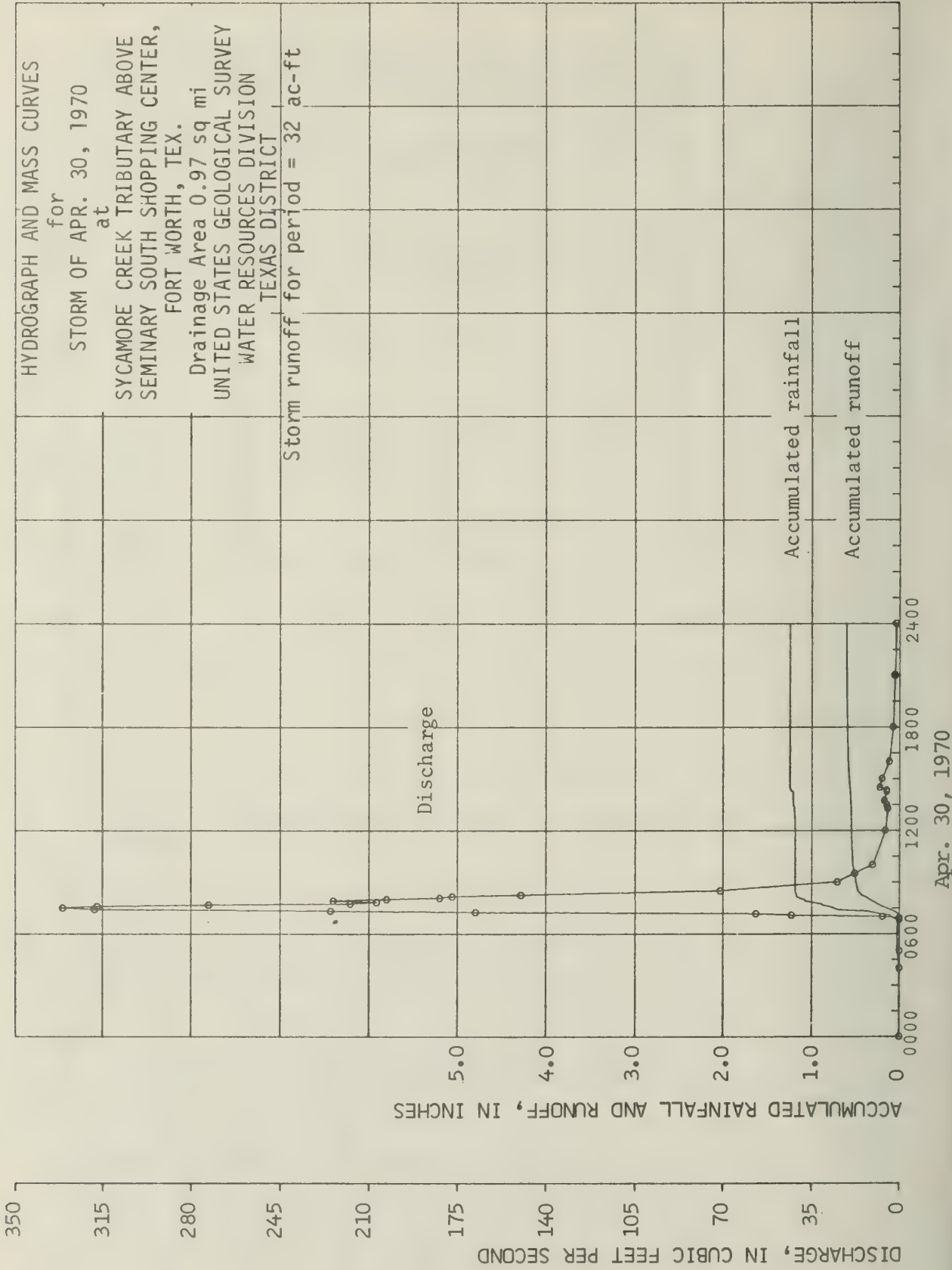
STATION NO. 03-0485.30									
STATION NAME: SYCAMORE CR TRIG ABV SEM. S. SHOP. CENTER, FT WORTH, TEX.									
STATION TYPE: STORM RAINFALL AND RUNOFF RECORD									
DATE & TIME									
MAY 30-31, 1970									
PRECIP. IN.									
CFS									
ACCUM. WEIGHTED PRECIP. IN.									
CFS									
ACCUM. RUNOFF									
CFS									
1970 WATER YEAR									
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STATION NO. 37 40030									
SYCAMORE CREEK TRAIL AVE SEC. 5, SHELBY CENTER, FT. WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
MAY 30-31, 1970									
DATE & TIME									
G A U G E N U M B E R									
1-ST 2-ST									
ACCUM. DISCHARGE									
WEIGHTED IN. RUNOFF									
PRECIP. IN. CFS									
1970 WATER YEAR									
IN. IN.									
MAY 30									
1950	2.15	1.65				2.07	50.0		0.3754
2000	2.20	1.66				2.08	27.0		0.3898
2030	2.22	1.62				2.10	12.0		0.3994
2400	2.24	1.70				2.12	7.3		0.4052
2130	2.27	1.75				2.16	5.1		0.4093
2200	2.32	1.73				2.20	8.5		0.4161
2230	2.33	1.80				2.21	6.5		0.4213
2300	2.33	1.80				2.21	3.8		0.4258
2400	2.33	1.80				2.21	1.6		0.4271
MAY 31									
0000	2.33	1.80				2.21	1.6		0.4297
0200	2.33	1.80				2.21	0.5		0.4322
0600	2.33	1.80				2.21	0.3		0.4344
1000	2.34	1.81				2.22	0.1		0.4354
1600	2.34	1.81				2.22	0.1		0.4366
2400	2.34	1.81				2.22	0.0		0.4368

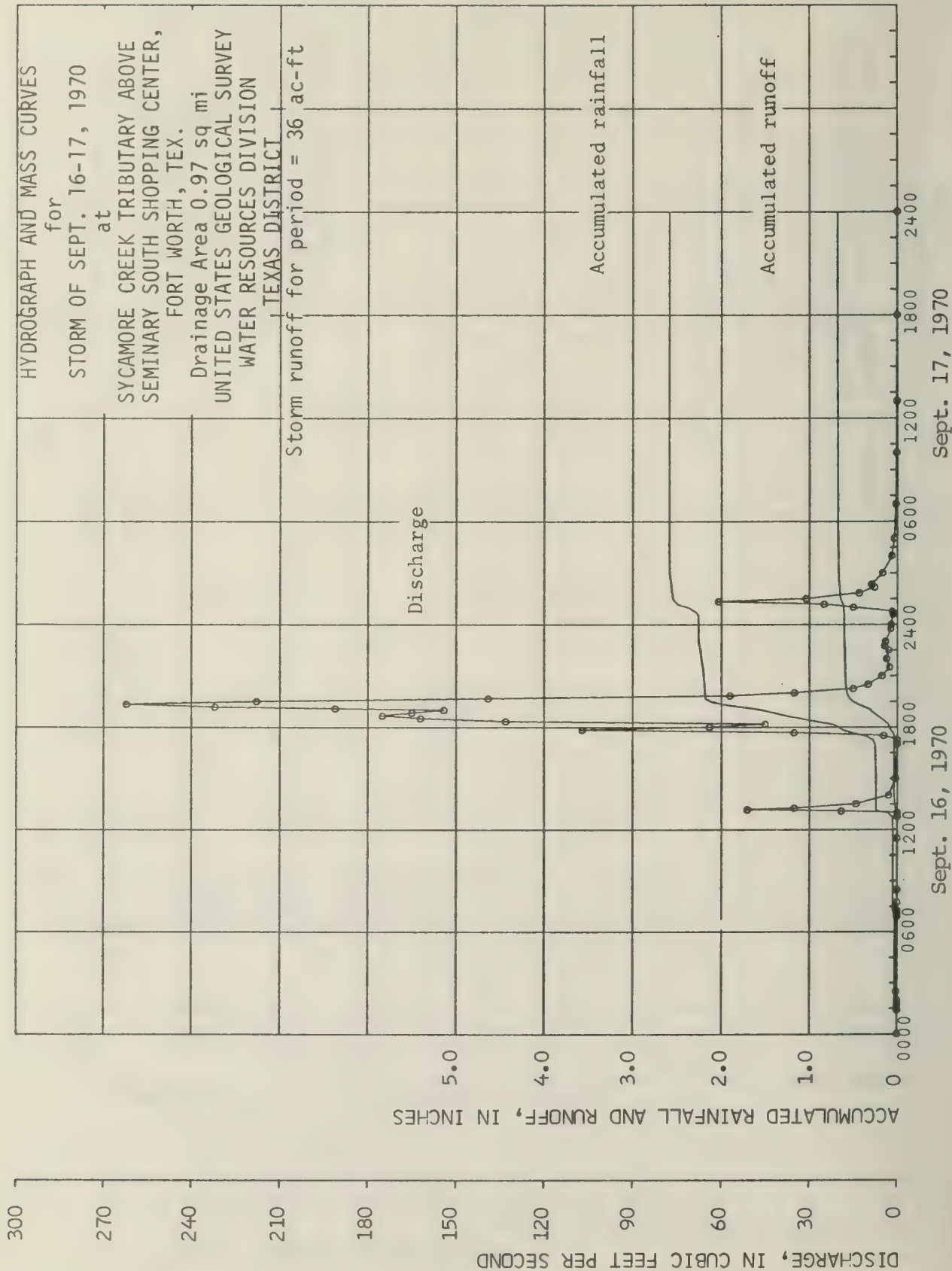
STCRM RAINFALL AND RUNOFF RECORD									
1970 WATER YEAR									
STA. NO. 08-0485.3C									
SYCAMORE CK TRIB AVE SEM. S. SHOP. CENTER, FT WORTH, TEX.									
SEPT. 16-17, 1970									
G A G E N U M B E R									
1-ST 2-ST									
DATE & TIME									
ACCUM. DISCHARGE ACCUM. CFS IN. IN.									
WEIGHTED PRECIP. IN.									
RUNOFF									
SEPT. 16									
0000	0.0	0.0						0.0	0.0000
0125	0.0	0.0						0.0	0.0000
0135	0.0	0.03						0.01	0.0000
0145	0.03	0.03						0.03	0.0000
0200	0.03	0.03						0.03	0.0000
0230	0.03	0.03						0.03	0.0013
0655	0.03	0.03						0.03	0.0015
0705	0.03	0.05						0.03	0.0015
0715	0.05	0.05						0.05	0.0015
0745	0.05	0.05						0.05	0.0016
0830	0.05	0.05						0.05	0.0019
1130	0.05	0.05						0.05	0.0022
1245	0.06	0.05						0.06	0.0023
1255	0.06	0.22						0.10	0.0023
1300	0.07	0.23						0.11	0.0023
1305	0.22	0.23						0.22	0.0048
1310	0.25	0.23						0.25	0.0116
1315	0.25	0.23						0.25	0.0209
1330	0.25	0.23						0.25	0.0293
1400	0.25	0.23						0.25	0.0329
1500	0.25	0.23						0.25	0.0345
1700	0.26	0.25						0.26	0.0347
1715	0.28	0.28						0.28	0.0348
1730	0.35	0.40						0.36	0.0364
1740	0.52	0.47						0.51	0.0457
1750	0.65	0.48						0.61	0.0742
1800	0.70	0.55						0.67	0.0912
1810	0.75	0.67						0.73	0.1032
1820	0.96	0.75						0.91	0.1386
1830	1.14	0.87						1.08	0.1817
1840	1.33	0.98						1.25	0.2283
1850	1.48	1.08						1.35	0.2723
1900	1.60	1.29						1.53	0.3030
1905	1.68	1.39						1.62	0.3284
1910	1.82	1.47						1.74	0.3748
1920	2.07	1.56						1.96	0.4445
1930	2.27	1.57						2.12	0.5026
1940	2.35	1.57						2.18	0.5396
1950	2.35	1.57						2.18	0.5548

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 03-0445.30									
SYCAMORE UK TRIB ADV SEN. S. SHIP. CENTER, FT WORTH, TEX.									
SEPT. 16-17, 1970									
DATE & TIME	G A C N U M B E R				ACCUM. WEIGHTED PRECIP.		DISCHARGE IN		
	1-ST	2-ST	3-ST	4-ST	IN.	PRECIP.	IN	CFS	IN.
SEPT. 15									
2000	2.36	1.52			2.19		35.0		0.5664
2010	2.36	1.52			2.19		15.0		0.5724
2030	2.36	1.52			2.19		10.0		0.5784
2100	2.37	1.50			2.20		5.3		0.5826
2130	2.38	1.60			2.21		2.7		0.5848
2200	2.40	1.61			2.23		3.7		0.5877
2230	2.41	1.63			2.24		3.0		0.5895
2300	2.42	1.64			2.25		4.4		0.5913
2330	2.43	1.65			2.26		4.1		0.5946
2345	2.43	1.65			2.26		2.3		0.5964
2400	2.43	1.65			2.26		2.2		0.5968
SEPT. 17									
0000	2.43	1.65			2.26		2.2		0.5979
0035	2.43	1.67			2.26		1.5		0.5987
0040	2.43	1.73			2.28		1.5		0.5989
0045	2.45	1.76			2.30		1.8		0.5993
0100	2.52	1.85			2.37		15.0		0.6043
0110	2.67	1.87			2.49		25.0		0.6110
0120	2.70	1.90			2.52		61.0		0.6272
0130	2.73	1.92			2.55		31.0		0.6396
0150	2.74	1.91			2.56		13.0		0.6465
0210	2.75	1.92			2.57		7.9		0.6497
0220	2.75	1.93			2.57		6.8		0.6555
0300	2.77	1.94			2.59		5.1		0.6623
0400	2.77	1.95			2.59		2.0		0.6655
0500	2.77	1.95			2.59		1.1		0.6682
0700	2.77	1.95			2.59		0.6		0.6704
1000	2.77	1.95			2.59		0.3		0.6721
1300	2.77	1.95			2.59		0.2		0.6735
1500	2.77	1.95			2.59		0.2		0.6749
2400	2.77	1.95			2.59		0.1		0.6754







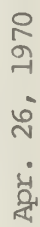


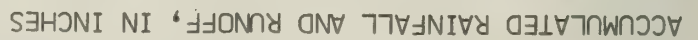
STATION NO. 09-0495.40									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CREEK TRIBUTARY AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
APRIL 25-26, 1970									
DATE & TIME	G A G E				WEIGHTED PRECIP.		1970 WATER YEAR		
	1-ST	2-ST			IN.	IN.	DISCHARGE	ACCUM.	RUNOFF
							IN		IN.
APR. 25									
0000	0.0	0.0					0.2	0.0003	
0200	0.0	0.0					0.3	0.0008	
0500	0.1	0.1					0.3	0.0012	
0800	0.2	0.1					26.0	0.0037	
1100	0.2	0.1					132.0	0.0163	
1400	0.4	0.3					199.0	0.0353	
1700	0.5	0.3					240.0	0.0582	
2000	0.5	0.4					261.0	0.0956	
2300	0.6	0.4					184.0	0.1348	
0100	0.6	0.4					78.0	0.1572	
0400	0.6	0.4					34.0	0.1670	
0700	0.6	0.5					19.0	0.1724	
1000	0.7	0.5					14.0	0.1764	
1300	0.7	0.5					16.0	0.1802	
1600	0.7	0.5					22.0	0.1834	
1900	0.8	0.6					54.0	0.1938	
2200	0.8	0.6					126.0	0.2300	
0100	0.8	0.7					32.0	0.2438	
0400	0.8	0.7					12.0	0.2542	
0700	0.8	0.7					3.7	0.2594	
1000	0.8	0.7					1.0	0.2615	
1300	0.8	0.7					.5	0.2622	
1600	0.8	0.7					.8	0.2623	
1900	0.8	0.7					29.0	0.2651	
2200	0.8	0.7					85.0	0.2732	
0100	0.8	0.7					108.0	0.2835	
0400	0.8	0.7					81.0	0.2912	
0700	0.8	0.7					51.0	0.2985	
1000	0.8	0.7					27.0	0.3037	
1300	0.8	0.7					20.0	0.3075	
1600	0.8	0.7					17.0	0.3108	
1900	0.8	0.7					24.0	0.3142	
2200	0.8	0.7					47.0	0.3187	
0100	0.8	0.7					149.0	0.3329	
0400	0.8	0.7					254.0	0.3571	
0700	0.8	0.7					360.0	0.3914	
1000	0.8	0.7					450.0	0.4343	
1300	0.8	0.7					512.0	0.4831	

STATION 1940-0485.40									
STATION RAINFALL AND RUNOFF RECORD									
SYCAMORE COUNTRY TRIP AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
MAY 30-31, 1970									
DATE & TIME	GAGE		N U M B E R		P R E C I P .		D I S C H A R G E		1970 WATER YEAR
	1-ST	2-ST	1	2	IN.	IN.	IN	IN.	
MAY 30									
0500	C.C	0.0			C.C	0.1		0.0003	
0520	C.C	0.0			0.0	0.1		0.0006	
0530	C.03	0.0			C.C2	0.1		0.0006	
0540	0.22	0.0			0.12	0.1		0.0006	
0550	C.35	0.0			C.20	0.1		0.0006	
0600	0.55	0.07			0.34	8.0		0.0018	
0605	1.05	0.19			C.67	116.0		0.0129	
0610	1.26	0.26			0.82	226.0		0.0344	
0615	1.31	C.47			C.94	280.0		0.0611	
0620	1.32	0.64			1.02	301.0		0.0898	
0625	1.32	0.69			1.04	366.0		0.1247	
0630	1.32	C.72			1.06	309.0		0.1541	
0635	1.32	0.77			1.08	228.0		0.1758	
0640	1.32	0.77			1.08	157.0		0.1983	
0650	1.32	C.77			1.08	114.0		0.2201	
0700	1.32	0.77			1.08	92.0		0.2553	
0730	1.32	0.77			1.08	28.0		0.2713	
0800	1.32	0.77			1.08	8.8		0.2789	
0900	1.33	0.77			1.08	2.9		0.2839	
1000	1.33	C.77			1.08	1.3		0.2869	
1300	1.33	0.77			1.08	0.8		0.2896	
1700	1.33	0.77			1.08	0.7		0.2913	
1715	1.35	0.81			1.11	0.7		0.2915	
1730	1.35	C.92			1.16	66.0		0.3073	
1740	1.35	0.92			1.16	17.0		0.3105	
1750	1.35	C.92			1.16	9.6		0.3123	
1800	1.35	0.92			1.16	4.7		0.3144	
1835	1.43	C.95			1.22	2.1		0.3153	
1845	1.76	1.21			1.52	1.8		0.3156	
1855	1.89	1.33			1.64	98.0		0.3297	
1900	2.03	1.43			1.77	204.0		0.3491	
1910	2.08	1.53			1.84	252.0		0.3731	
1915	2.15	1.58			1.92	261.0		0.3980	
1920	2.16	1.61			1.92	254.0		0.4222	
1925	2.17	1.63			1.93	245.0		0.4455	
1930	2.18	1.64			1.94	203.0		0.4648	
1935	2.18	1.64			1.94	169.0		0.4809	
1940	2.19	1.65			1.95	147.0		0.4949	
						126.0		0.5129	

STORM RAINFALL AND RUNOFF RECORD									
1970 WATER YEAR									
STATION NO. 04954									
SYMBOLS FOR TRIP AT INTERSTATE HWY 35-N, FT WORTH, TEX.									
MAY 30-31, 1970									
DATE & TIME	1-ST	2-ST	GAUGE	NUMBER	WEIGHTED PRECIP.	DISCHARGE IN	ACCUM. IN.	DISCHARGE IN	ACCUM. RUNOFF
MAY 30									
1950	2.16	1.65			1.95	93.0			0.5307
2000	2.20	1.64			1.96	97.0			0.5525
2050	2.22	1.68			1.98	32.0			0.5709
2100	2.24	1.70			2.00	22.0			0.5835
2130	2.27	1.75			2.04	20.0			0.5950
2200	2.32	1.73			2.09	27.0			0.6105
2230	2.33	1.80			2.10	14.0			0.6185
2300	2.35	1.80			2.10	7.8			0.6253
2400	2.33	1.80			2.10	2.7			0.6268
MAY 31									
0000	2.33	1.80			2.10	2.7			0.6299
0200	2.33	1.80			2.10	1.0			0.6333
0600	2.33	1.80			2.10	0.5			0.6358
1000	2.34	1.81			2.11	0.4			0.6381
1600	2.34	1.81			2.11	0.2			0.6396
2000	2.34	1.81			2.11	0.2			0.6404
2400	2.34	1.81			2.11	0.2			0.6408

STATION 0435.40									
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0435.40									
SYCAMORE CK TRIP AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
SEPT. 16-17, 1970									
G A G E N U M B E R									
DATE & TIME									
1-ST	2-ST								
157C WATER YEAR	DISCHARGE	ACCUM.	WEIGHTED	PRECIP.	IN.	CFS	IN.	ACCUM.	RUNOFF
IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
SEPT. 16									
0600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0000	0.0
0125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.0
0135	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001	0.3
0145	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0010	3.7
0200	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0018	1.8
0230	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0033	0.5
0655	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0036	0.1
0705	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0036	0.1
0715	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0043	1.7
0745	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0050	1.0
0830	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0057	0.4
1130	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0061	0.2
1245	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.0062	0.2
1255	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.0063	0.5
1300	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.0101	40.0
1305	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.0211	115.0
1310	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.0299	92.0
1315	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.0494	102.0
1350	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.0649	36.0
1400	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.0703	6.2
1500	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.0720	1.0
1700	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.0723	0.2
1715	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.0724	0.2
1730	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.0820	40.0
1740	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.1112	153.0
1750	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.1428	165.0
1800	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.1661	122.0
1810	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.1968	160.0
1820	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.2426	239.0
1830	1.14	1.14	1.14	1.14	1.14	1.14	1.14	0.2951	274.0
1840	1.33	1.33	1.33	1.33	1.33	1.33	1.33	0.3492	282.0
1850	1.48	1.48	1.48	1.48	1.48	1.48	1.48	0.3966	247.0
1900	1.60	1.60	1.60	1.60	1.60	1.60	1.60	0.4338	259.0
1905	1.68	1.68	1.68	1.68	1.68	1.68	1.68	0.4634	311.0
1910	1.82	1.82	1.82	1.82	1.82	1.82	1.82	0.5156	364.0
1920	2.07	2.07	2.07	2.07	2.07	2.07	2.07	0.5856	365.0
1930	2.27	2.27	2.27	2.27	2.27	2.27	2.27	0.6416	292.0
1940	2.35	2.35	2.35	2.35	2.35	2.35	2.35	0.6782	191.0
1950	2.35	2.35	2.35	2.35	2.35	2.35	2.35	0.7035	132.0





HYDROGRAPH AND MASS CURVES
for
STORM OF MAY 30-31, 1970
at
SYCAMORE CREEK TRIBUTARY A
INTERSTATE HIGHWAY 35-W,
FORT WORTH, TEX.
Drainage Area 1.35 sq mi
UNITED STATES GEOLOGICAL SUR
WATER RESOURCES DIVISION
TEXAS DISTRICT

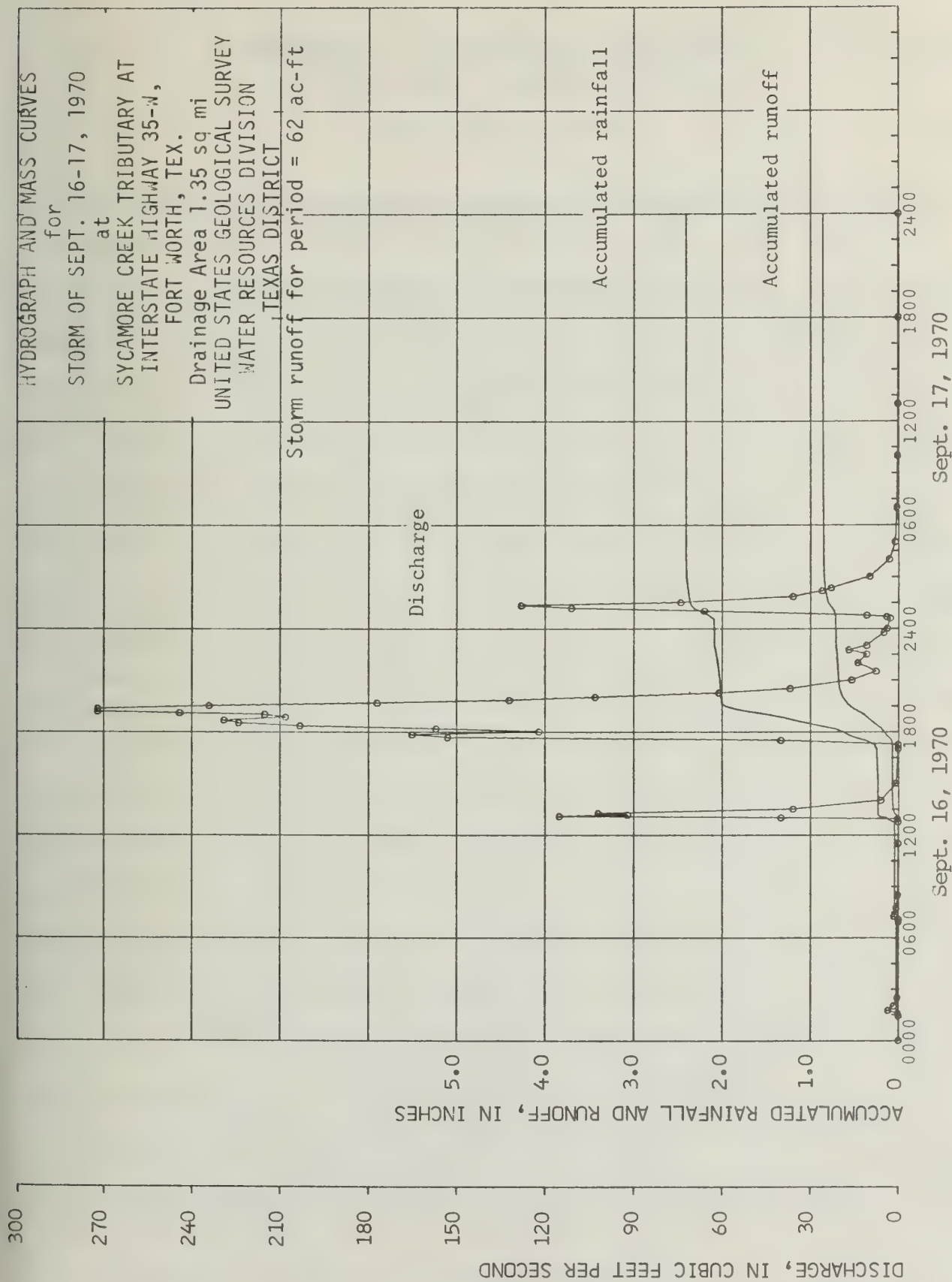
Storm runoff, for period = 43 ac-ft

Accumulated rainfall

Accumulated runoff

May 31, 1970

May 30, 1970



UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY - TEXAS DISTRICT

RUNOFF COMPUTATIONS

Station Estimate of runoff from Seminary South Shopping Center
at Fort Worth, Tex.
 Period of Record May 30-31, 1970 Drainage Area 0.38 sq. mi.

Time	Rainfall Acc. inches	Sh Adj.	Discharge			Runoff	
			C. f. s.	Inc.	In/Hr	Inches	Acc. In.
May 30							
0000	0		0.04	64	.0002	.0005	.0005
0520	0		.04	66	.0002	.0006	.0011
0530	0		.04	4	.0002	.0000	.0011
0540	0		.04	4	.0002	.0000	.0011
0550	0		.04	4	.0002	.0000	.0011
0600	.07		8.0	3	.0326	.0041	.0052
0605	.19		116	2	.4732	.0394	.0446
0610	.26		225	2	.9180	.0762	.1208
0615	.47		278	2	1.1342	.0941	.2149
0620	.64		240	2	.9792	.0813	.2962
0625	.69		202	2	.8242	.0684	.3646
0630	.72		(90)	2	.3672	.0305	.3951
0635	.77		(55)	2	.2244	.0186	.4137
0640	.77		(30)	3	.1224	.0153	.4290
0650	.77		(15)	4	.0612	.0102	.4392
0700	.77		(10)	8	.0408	.0136	.4528
0730	.77		(6.0)	12	.0245	.0122	.4650
0800	.77		(3.0)	18	.0122	.0092	.4742
0900	.77		(1.5)	36	.0061	.0092	.4834
1100	.77		(.70)	48	.0029	.0058	.4892
1300	.77		(.50)	72	.0020	.0040	.4952
1700	.77		(.40)	51	.0016	.0034	.4986
1715	.81		(.40)	6	.0016	.0004	.4990
1730	.92		66	5	.2693	.0561	.5551
1740	.92		17	4	.0694	.0116	.5667
1750	.92		9.0	4	.0367	.0061	.5728
1800	.92		3.0	9	.0122	.0046	.5774
Time	Rainfall Acc. inches	Sh Adj.	Discharge			Runoff	
			C. f. s.	Inc.	In/Hr.	Inches	Acc. In.
1835	.92		1.0	9	.0041	.0015	.5789
1845	.95		.60	4	.0024	.0004	.5793
1855	1.21		97	3	.3958	.0495	.6288
1900	1.33		204	2	.8323	.0691	.6779
1905	1.43		251	2	1.0241	.0850	.7829
1910	1.53		237	2	.9670	.0803	.8632
1915	1.58		134	2	.5467	.0454	.9086
1920	1.61		57	2	.2326	.0193	.9279
1925	1.63		(40)	2	.1632	.0136	.9415
1930	1.64		(30)	2	.1224	.0102	.9517
1935	1.64		(23)	2	.0938	.0078	.9595
1940	1.65		(18)	3	.0734	.0092	.9687
1950	1.65		(15)	4	.0612	.0102	.9789
2000	1.66		(13)	8	.0530	.0176	.9965
2030	1.68		(11)	12	.0449	.0225	1.0190
2100	1.70		(10)	12	.0408	.0204	1.0394
2130	1.75		(8.0)	12	.0326	.0163	1.0557
2200	1.79		21	12	.0857	.0428	1.0985
2230	1.80		6.0	12	.0245	.0122	1.1107
2300	1.80		2.0	18	.0082	.0062	1.1169
2400	1.80		1.0	12	.0041	.0020	1.1189
			6.9748576				
May 31			11				
0000	1.80		1.0	2	.0041	.0041	1.1230
0200	1.80		.38	10	.0016	.0080	1.1310
1000	1.81		.20	22	.0008	.0088	1.1398
2400	1.81		.13	14	.0005	.0035	1.1433
			12.0248				
			0.25 - 22.3 AC-FT				

Computed by BCM Date 9-16-71 Checked by JMT Date 9-21-71

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY - TEXAS DISTRICT

RUNOFF COMPUTATIONS

Station Estimate of runoff from Seminary South Shopping Center
at Fort Worth, Tex.
Period of Record Sept. 16-17, 1970 Drainage Area 0.38 sq. mi.

Time	Rainfall Acc. inches	St. Adj.	Discharge			Runoff			Time	Rainfall Acc. inches	St. Adj.	Discharge			Runoff		
			C. f. s.	Inc.	In Hr.	Inches	Acc.	In				C. f. s.	Inc.	In Hr.	Inches	Acc.	In
Sept. 16									1810	.67		108	4	.4406	.0736	.4439	
0000	0		.03	17	.0001	.0001	.0001		1820	.75		140	4	.5712	.0954	.5393	
0125	0		.03	19	.0001	.0001	.0002		1830	.87		118	4	.4814	.0804	.6197	
0135	.03		.29	4	.0012	.0002	.0004		1840	.98		112	4	.4970	.0763	.6960	
0145	.03		3.7	5	.0151	.0031	.0035		1850	1.08		78	4	.3182	.0531	.7491	
0200	.03		1.8	9	.0073	.0027	.0062		1900	1.29		100	3	.4080	.0510	.8001	
0230	.03		.22	59	.0009	.0022	.0084		1905	1.39		157	2	.6406	.0532	.8533	
0655	.03		.06	55	.0002	.0005	.0089		1910	1.47		170	3	.6936	.0867	.9400	
0705	.05		.08	4	.0003	.0000	.0089		1920	1.56		118	4	.4814	.0804	1.0204	
0715	.05		1.6	8	.0065	.0022	.0111		1930	1.57		(80)	4	.3264	.0545	1.0749	
0745	.05		.90	15	.0037	.0023	.0134		1940	1.57		(50)	4	.2040	.0341	1.1090	
0830	.05		.25	45	.0010	.0019	.0153		1950	1.57		(40)	4	.1632	.0273	1.1363	
1130	.05		.06	51	.0002	.0004	.0157		2000	1.58		(31)	5	.1265	.0263	1.1626	
1245	.05		.10	17	.0004	.0003	.0160		2015	1.58		(23)	6	.0938	.0234	1.1860	
1255	.22		.46	3	.0019	.0002	.0162		2030	1.59		(16)	9	.0653	.0245	1.2105	
1300	.23		40	2	.1632	.0136	.0298		2100	1.59		10	12	.0408	.0204	1.2309	
1305	.23		115	2	.4692	.0391	.0689		2130	1.60		5.0	12	.0204	.0102	1.2411	
1310	.23		72	2	.2938	.0244	.0933		2200	1.61		10	12	.0408	.0204	1.2615	
1315	.23		52	4	.2122	.0354	.1287		2230	1.63		6.0	9	.0245	.0092	1.2707	
1330	.23		16	9	.0653	.0245	.1532		2245	1.64		13	6	.0530	.0132	1.2839	
1400	.23		3.0	18	.0082	.0012	.1544		2300	1.65		7.0	12	.0286	.0143	1.2982	
1500	.23		.20	36	.0008	.0012	.1556		2345	1.65		1.0	12	.0041	.0020	1.3002	
1700	.25		.10	27	.0004	.0004	.1560		2400	1.65		1.0	3	.0041	.0005	1.3007	
1715	.28		.10	6	.0004	.0001	.1561					7693.73	576				
1730	.40		38	5	.1550	.0322	.1883					13	= 26.4	AC-FT			
1740	.47		137	4	.5590	.0934	.2817										
1750	.48		90	4	.3672	.0613	.3430										
1800	.55		40	4	.1632	.0273	.3703										

Computed by BCM Date 9-15-71 Checked by JMT Date 9-21-71

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY - TEXAS DISTRICT

RUNOFF COMPUTATIONS

Station Estimate of runoff from Seminary South Shopping Center
at Fort Worth, Tex.
 Period of Record Sept. 16-17, 1970 Drainage Area 0.38 sq. mi.

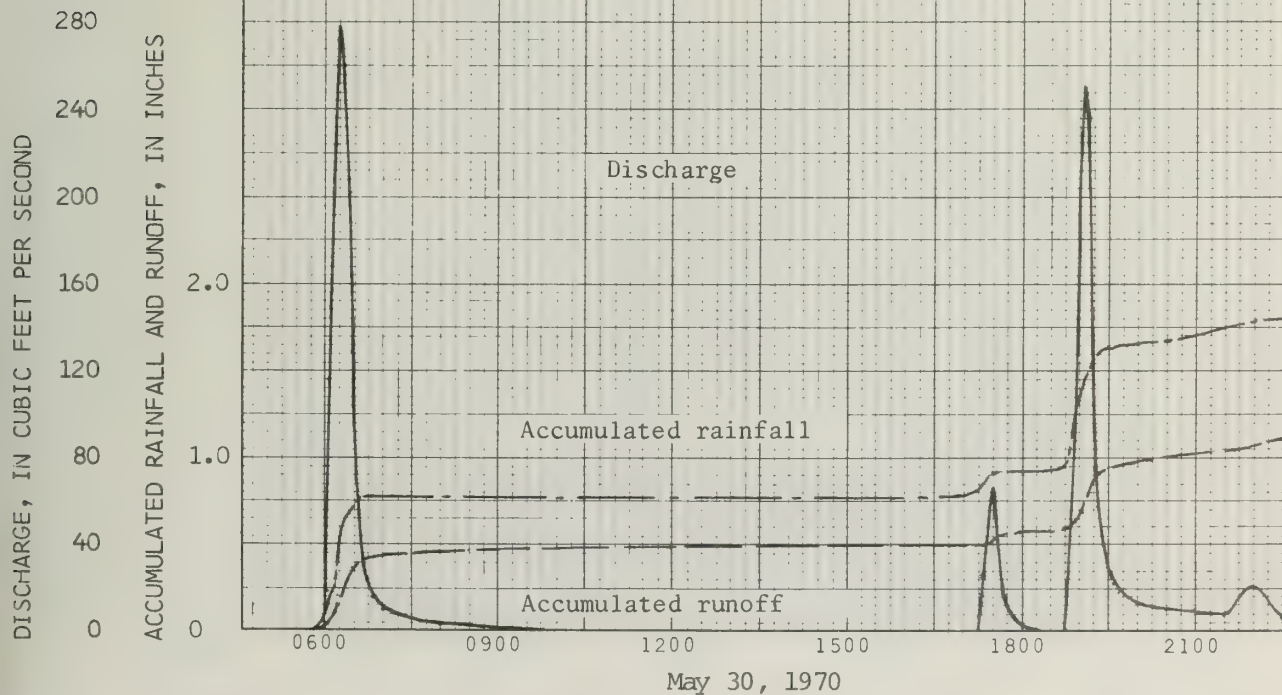
Time	Rainfall (Inches)	Stn Adj	Discharge			Runoff	
			C. f. s.	Inc.	In. Hr	Inches	Acc. In
Sept. 17, 1970							
0000	1.65		1.0	7	.0041	.0012	1.3019
0035	1.67		1.0	8	.0041	.0014	1.3033
0040	1.73		2.0	2	.0082	.0007	1.3040
0045	1.76		9.0	4	.0367	.0061	1.3101
0100	1.85		60	5	.2448	.0510	1.3611
0110	1.87		94	4	.3835	.0639	1.4250
0120	1.90		97	4	.3958	.0660	1.4910
0130	1.90		(25)	6	.1020	.0255	1.5165
0150	1.91		(20)	8	.0816	.0272	1.5437
0210	1.92		(13)	6	.0530	.0132	1.5569
0220	1.93		(10)	10	.0408	.0170	1.5739
0300	1.94		(5)	20	.0204	.0170	1.5909
0400	1.95		1.0	84	.0041	.0144	1.6053
1000	1.95		.10	240	.0004	.0040	1.6093
2400	1.95		0	168	.0000	.0000	1.6093
			1,185.00		576		
			3.2				

Computed by BCM Date 9-21-71 Checked by _____ Date _____

HYDROGRAPH and MASS CURVES
for
STORM OF MAY 30, 1970
at
SEMINARY SOUTH SHOPPING CENTER
AT FORT WORTH, TEX.

Drainage Area 0.38 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 22 ac-ft.



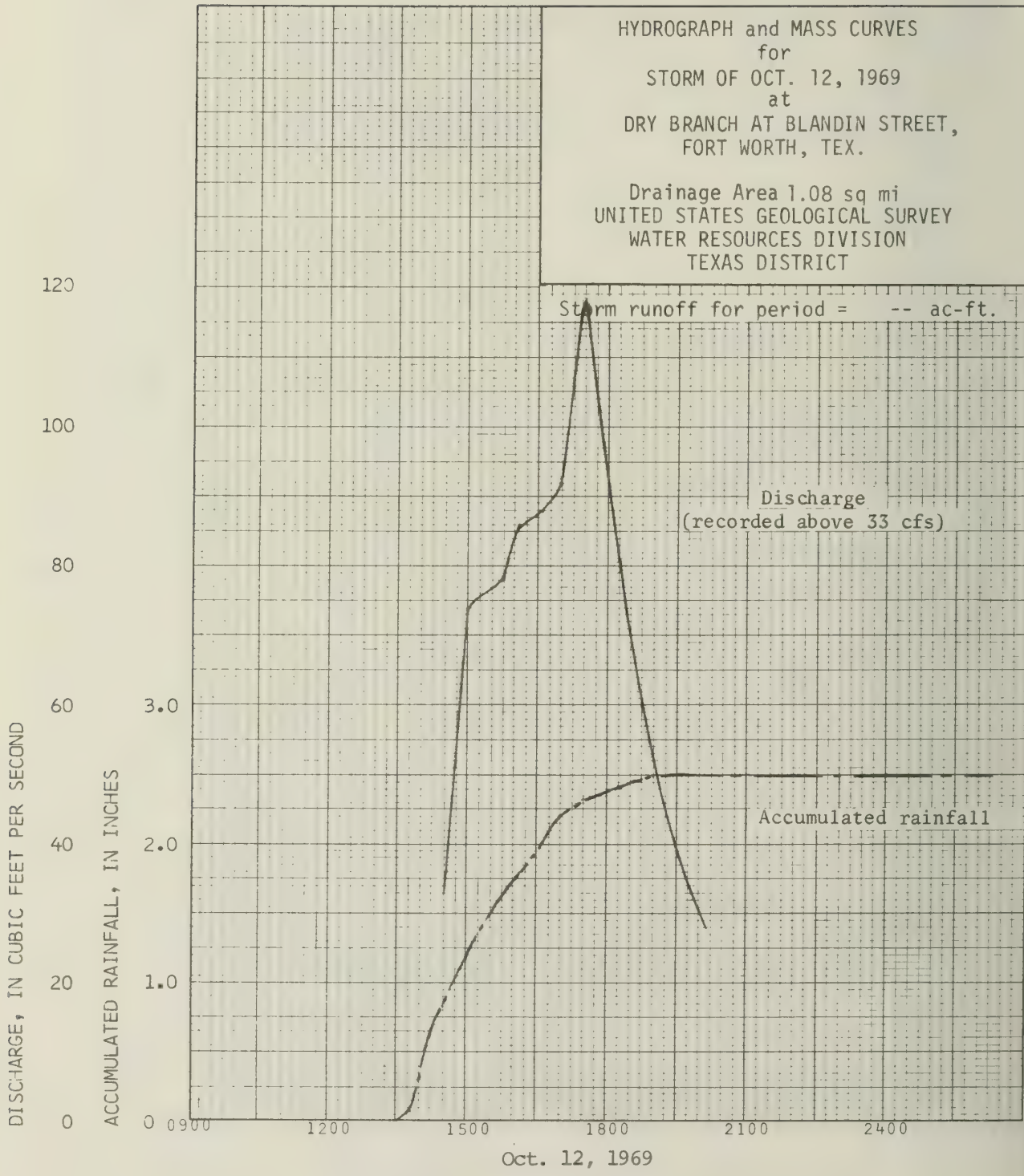
HYDROGRAPH and MASS CURVES
for
STORM OF SEPT. 16-17, 1970
at
SEMINARY SOUTH SHOPPING CENTER
AT FORT WORTH, TEX.

Drainage Area 0.38 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 32 ac-ft.



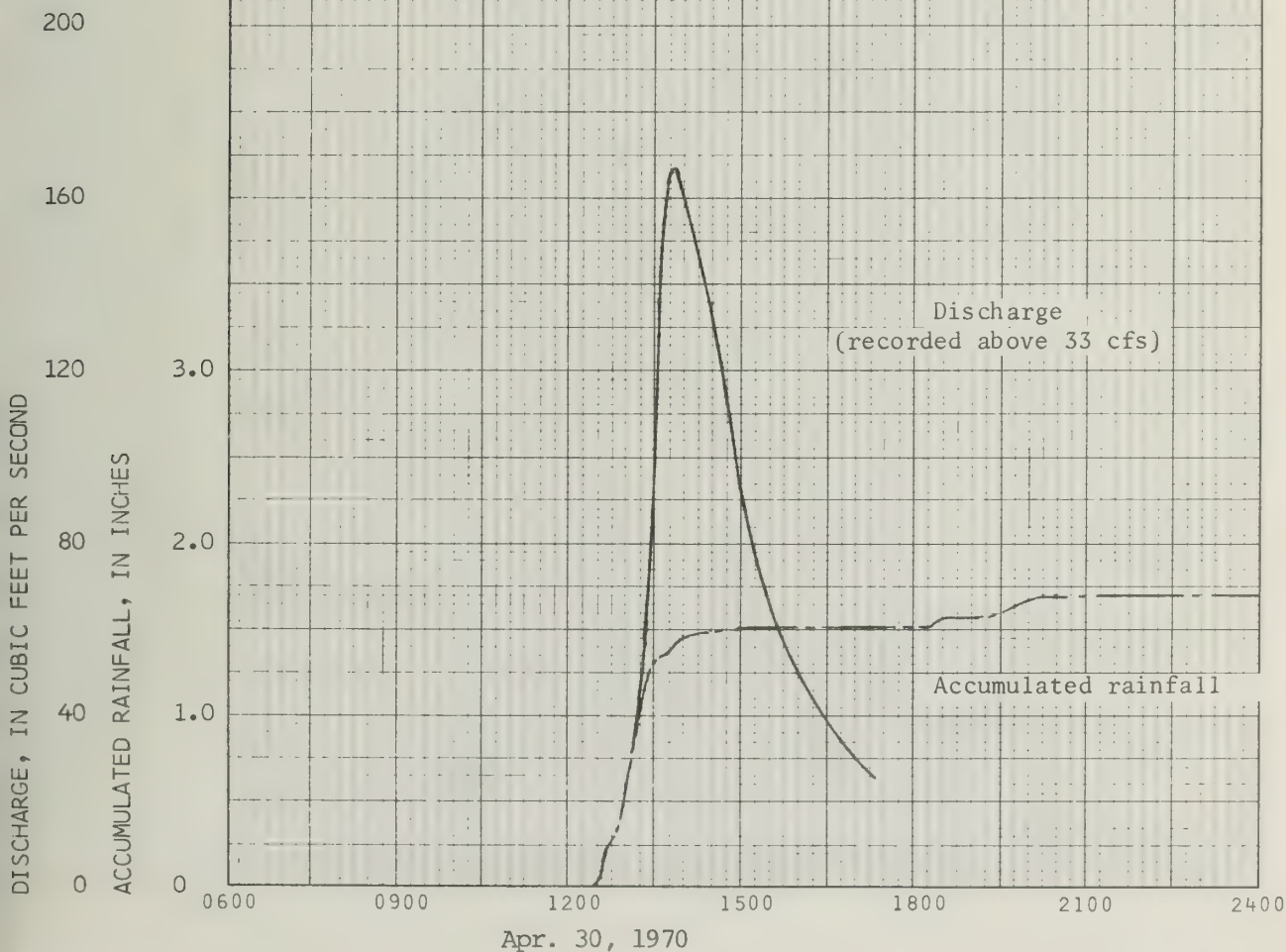
STATION 3-2455.0											
STORM RAINFALL AND RUNOFF RECORD											
1970 WATER YEAR											
NEW ORLEANS AT BLANDIN STREET, FT WORTH, TEX.											
SEPT. 16-17, 1970											
DATE	TIME	1-23	GAGE	NUMBER	R	PRECIP. IN.		DISCHARGE IN		ACCUM. WEIGHTED PRECIP. IN.	RUNOFF IN.
								CFS			
ANALYSIS INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN											
SEPT 17											
0400								4.05	43.0	*****	*****
0430								4.05	44.0	*****	*****
0440								4.05	33.0	*****	*****
0450								4.06	*****	*****	*****
0500								4.09	*****	*****	*****
0600								4.09	*****	*****	*****



HYDROGRAPH and MASS CURVES
for
STORM OF APR. 30, 1970
at
DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEX.

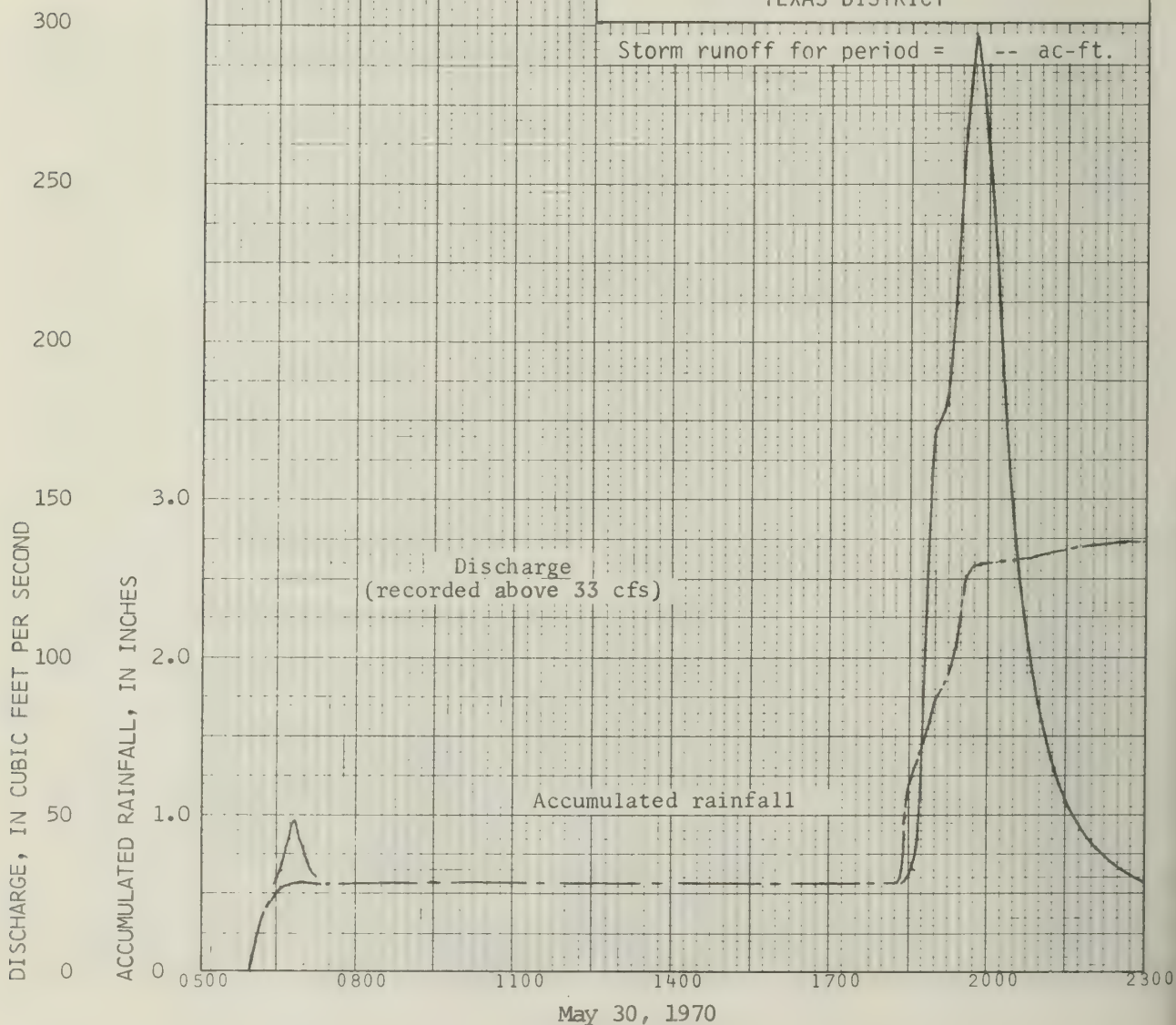
Drainage Area 1.08 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

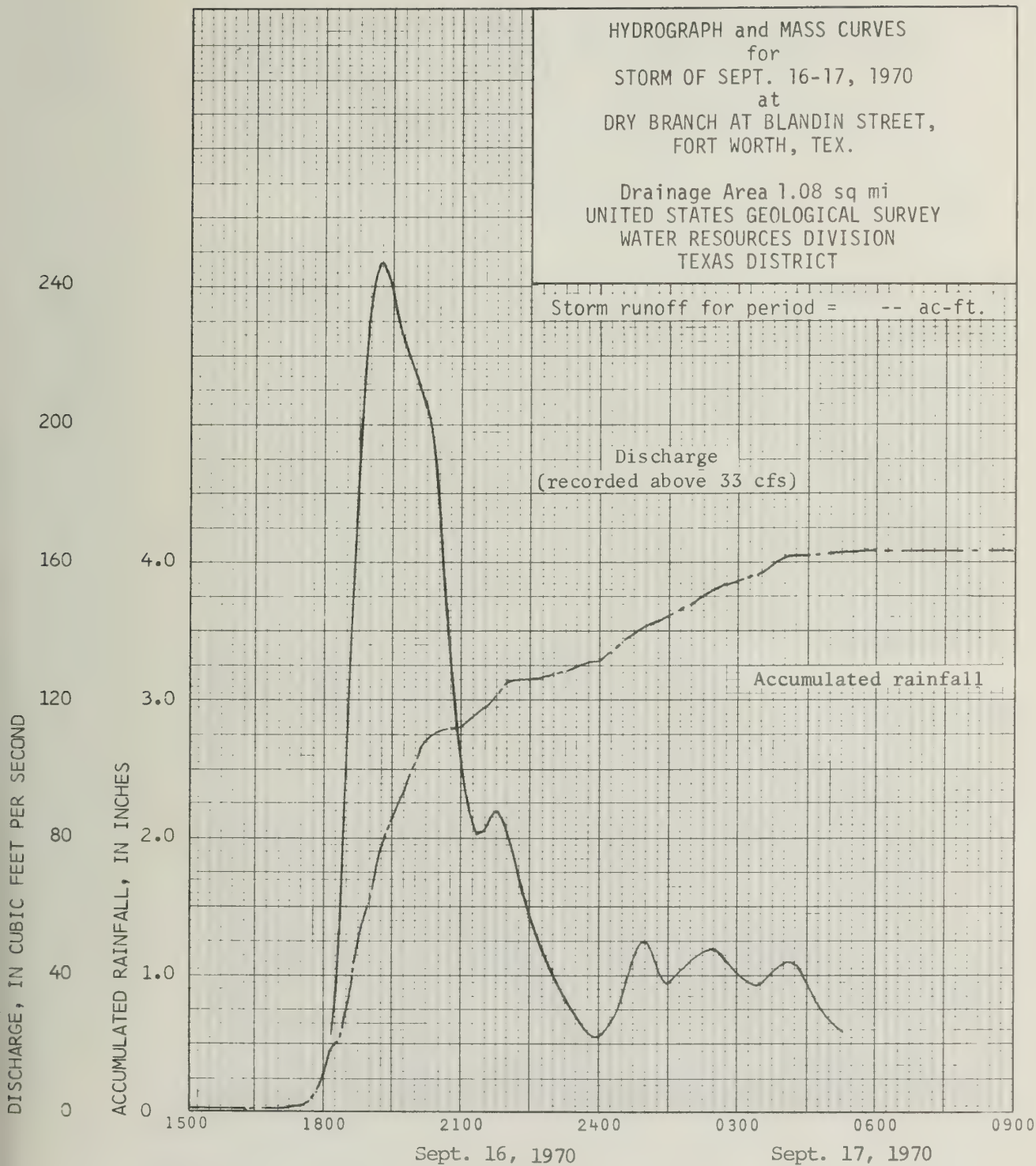
Storm runoff for period = -- ac-ft.



HYDROGRAPH and MASS CURVES
for
STORM OF MAY 30, 1970
at
DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEX.

Drainage Area 1.08 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT





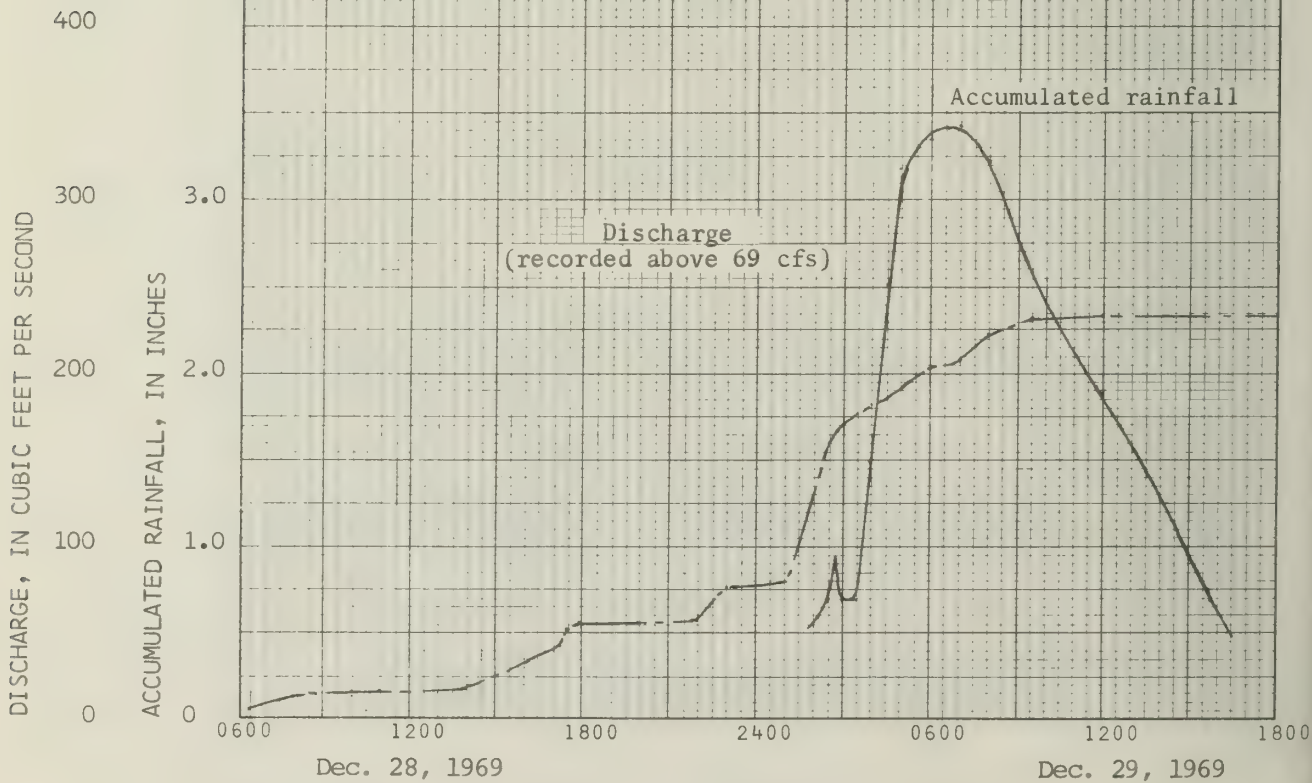
STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 03-245-023									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 420, FT. WORTH, TEX.									
SEPT. 16-17, 1970									
DATE & TIME	GAGE NUMBER			PRECIP.			DISCHARGE		
	1-LF	2-LF	3-LF	IN.	WEIGHTED	ACCUM.	IN	WEIGHTED	ACCUM.
SEPT. 16									
0000	0.0	0.0		0.0					
0100	0.0	0.0		0.0					
0200	0.14	0.15		0.14					
0300	0.14	0.13		0.15					
0400	0.13	0.20		0.22					
0500	0.61	0.70		0.63					
0600	1.26	1.43		1.29			76.0		
0700	1.62	1.50		1.66			364.0		
0800	1.32	2.04		1.87			436.0		
0900	1.36	2.13		2.02			452.0		
1000	2.15	2.32		2.19			364.0		
1100	1.61	2.22		2.67			301.0		
1200	2.80	2.00		2.85			280.0		
1300	1.35	3.03		2.89			515.0		
1400	2.64	3.03		2.09			402.0		
1500	2.06	2.77		3.11			354.0		
1600	3.07	3.25		3.12			448.0		
1700	2.03	3.31		3.14			392.0		
1800	3.12	3.27		3.18			371.0		
1900	2.20	3.44		3.26			476.0		
2000	2.25	3.51		3.31			469.0		
SEPT. 17									
0000	3.25	3.61		3.31			469.0		
0100	3.43	3.77		3.51			468.0		
0200	3.53	4.07		3.74			406.0		
0300	4.01	3.25		4.09			392.0		
0400	4.11	4.63		4.20			392.0		
0500	4.14	4.61		4.23			420.0		
0600	4.20	4.84		4.29			436.0		
0700	4.24	4.65		4.33			468.0		
0800	4.25	4.62		4.34			439.0		
0900	4.25	4.63		4.34			385.0		
1000	4.25	4.63		4.34			322.0		
1100	4.25	4.64		4.34			306.0		
1200	4.25	4.64		4.34			230.0		
1300	4.25	4.64		4.34			164.0		
1400	4.25	4.64		4.34			97.0		
1500	4.25	4.64		4.34			76.0		
1600	4.25	4.64		4.34			*****		
1700	4.25	4.64		4.34			*****		
1800	4.25	4.64		4.34			*****		
1900	4.25	4.64		4.34			*****		
2000	4.25	4.64		4.34			*****		

AN ACTUAL DISCHARGE INDICATES COMPLETE DISCHARGE RECORDS ARE NOW COLLECTED FOR THIS GAGE

HYDROGRAPH and MASS CURVES
for
STORM OF DEC. 28-29, 1969
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEX.

Drainage Area 5.64 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

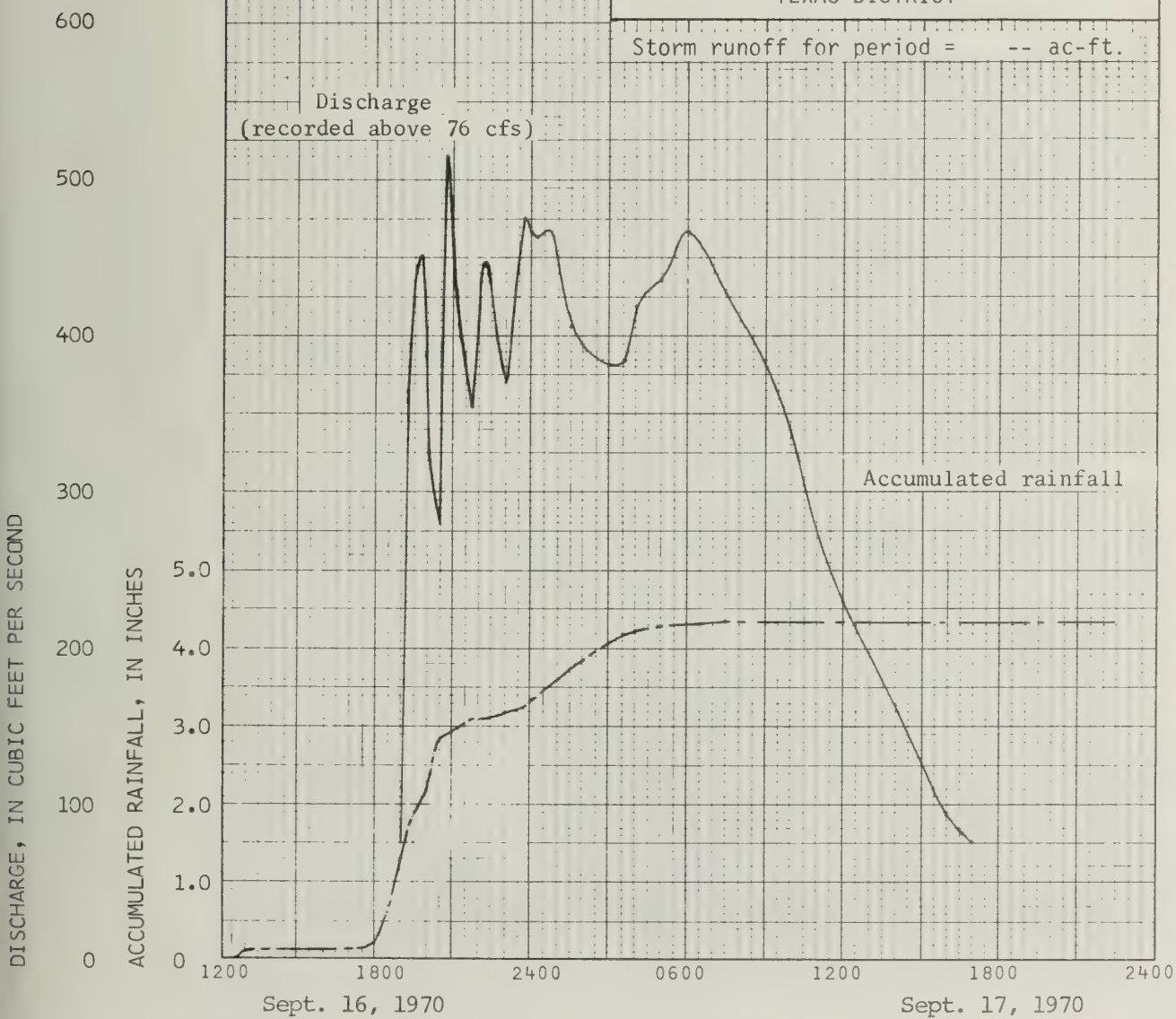
Storm runoff for period = -- ac-ft.



HYDROGRAPH and MASS CURVES
for
STORM OF SEPT. 16-17, 1970
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEX.

Drainage Area 5.64 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.



165
Reof

Annual Compilation and Analysis of Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1971

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY - WATER RESOURCES DIVISION



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AT URBANA-CHAMPAIGN

Prepared in cooperation with the City of Fort Worth

Annual Compilation and Analysis of Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1971

By B. B. Hampton

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-WATER RESOURCES DIVISION

Texas District Open - File Report

I. D. Yost, District Chief



Prepared in cooperation with the City of Fort Worth

1973

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ANNUAL COMPILATION AND ANALYSIS OF HYDROLOGIC DATA
FOR URBAN STUDIES IN THE FORT WORTH, TEXAS
METROPOLITAN AREA
1971

By

B. B. Hampton

INTRODUCTION

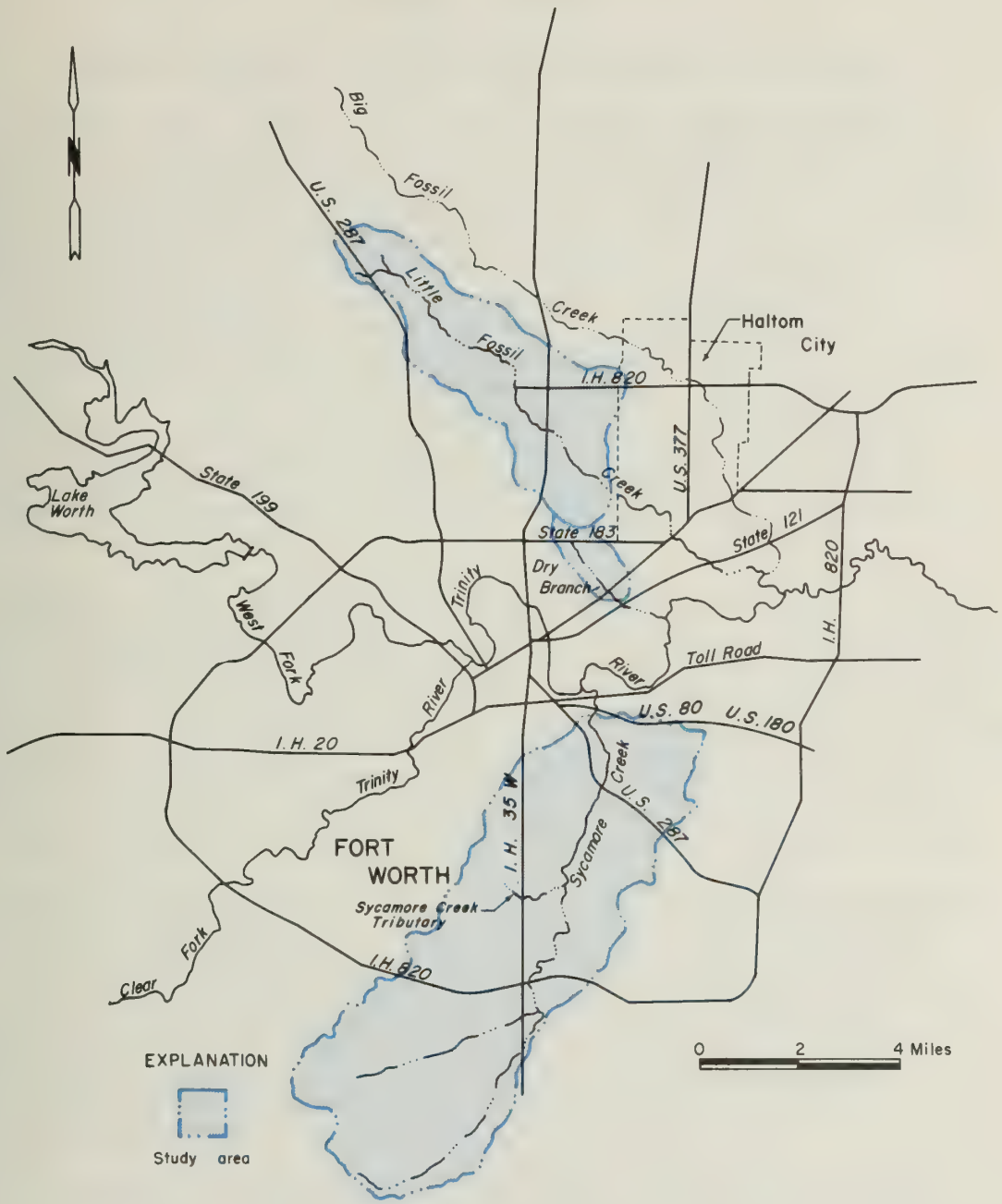
Hydrologic investigations of urban areas in Texas were begun by the U.S. Geological Survey in 1954. These investigations are now in progress in several major metropolitan areas including Austin, Dallas, Dallas County, Houston, and San Antonio.

In October 1968, the Geological Survey in cooperation with the city of Fort Worth Department of Public Works began a program of hydrologic investigations on several small streams in Fort Worth. The investigations are designed to evaluate factors affecting floods on small streams in the metropolitan area. Studies of additional streams, one of which drains beneath the impervious area of a shopping center, were added to the program in October 1969. The objectives of the program are:

1. To determine, on the basis of historical data and hydrologic analyses, the magnitude and frequency of floods.
2. To document and define the areal extent of floods of greater than ordinary magnitude.
3. To determine the effect of urban development on flood peaks and volume.

This report is the third in a series of reports to be published annually for the Fort Worth area as part of a continuing program. The report presents the basic hydrologic data collected in four study areas during the 1971 water year (October 1, 1970, to September 30, 1971). The four study areas within the metropolitan area are Sycamore Creek, Sycamore Creek tributary, Dry Branch, and Little Fossil Creek (fig. 1). The Sycamore Creek tributary study area includes the highly impervious area of the Seminary South Shopping Center (fig. 1) as a subarea.

To facilitate the publication and distribution of this report at the earliest feasible time, certain material contained herein does not conform to the formal publication standards of the U.S. Geological Survey.



Base from General Highway
map of Texas

FIGURE 1.— Locations of Sycamore Creek, Sycamore Creek tributary, Dry Branch, and Little Fossil Creek study areas

WATERSHED FEATURES

Sycamore Creek and Sycamore Creek Tributary Study Areas

Sycamore Creek (fig. 2) is located south and east of downtown Fort Worth in south-central Tarrant County. The headwaters originate in a rural area in the southwest section of Fort Worth. Parts of this rural area are beginning to be urbanized. The stream flows in an open channel northeastward, passing beneath Interstate Highway 35-W and into southeast Fort Worth. The stream continues its northeasterly course through residential and light industrial sections of the near-east side of Fort Worth and thence to the West Fork Trinity River. The creek decreases in altitude from approximately 840 feet above mean sea level at the headwaters to 630 feet at Interstate Highway 35-W, a distance of 8.2 miles. The creek decreases in altitude from 630 feet at Interstate Highway 35-W to 496 feet at U.S. Highways 80 and 180 (0.9 mile upstream from West Fork Trinity River), a distance of 7.8 miles. The altitude at the mouth of Sycamore Creek is about 489 feet above mean sea level.

Sycamore Creek tributary (fig. 2) is within the Sycamore Creek drainage basin. The tributary is in the south-central section of Fort Worth. The headwaters originate approximately 1.3 miles west of Seminary South Shopping Center (fig. 2). A storm-water drainage system collects runoff from a residential-park area through street-gutter inlets upstream from Hemphill Street (fig. 2). The tributary flows easterly through a system of open channel and pipe-arch and box culverts. Storm water from the shopping center, two peripheral residential-commercial areas, and Interstate Highway 35-W flows into the underground drainage system.

Sycamore Creek tributary decreases in altitude from approximately 760 feet above mean sea level at the headwaters to approximately 649 feet at the west edge of Seminary South Shopping Center, a distance of 1.3 miles. At the western edge of the shopping center and at the entrance of the underground pipe-arch culvert, the altitude changes abruptly from 649 to 643 feet in a distance of about 25 feet. The tributary then decreases in altitude from 643 feet at the entrance to 618.7 feet at the downstream side of Interstate Highway 35-W, a distance of approximately 0.7 mile.

The Seminary South Shopping Center contains many retail business establishments, large parking areas, and one high-rise building. The flat roofs of many buildings are topped with aggregate, and considerable storage of water can occur on the rooftops. The drainage system in the center is composed of gutter inlets connected to many subsurface concrete lateral pipes, each pipe feeding a main. The mains drain into a central concrete-arch culvert beneath the center. Runoff (estimated) from the shopping center is the differences of routed runoff between the gaging stations above (No. 08048530) and below (No. 08048540) the shopping center. Because of the impervious area of the shopping center, monthly rainfall and runoff data are presented in table 1.

Table 1.--Summary of monthly rainfall-runoff relationship for the 1971 water year at Seminary South Shopping Center.

Month	(2-ST) Rainfall (inches)	Runoff (inches) <u>1/</u>	Ratio of runoff to rainfall <u>1/</u>
1970			
October	1.60	0.94	0.59
November	.16	.12	.75
December	.85	.47	.55
1971			
January	.17	.16	.94
February	1.29	.16	.12
March	.24	.05	.21
April	2.75	1.29	.47
May	3.38	2.02	.60
June	1.11	.80	.72
July	4.87	3.05	.63
August	3.20	1.80	.56
September	1.95	.81	.42
Totals	21.57	11.67	.54

1/ Data unadjusted for sustained low-flow effluents from shopping center.

Dry Branch and Little Fossil Creek Study Areas

Dry Branch (fig. 3) is located in the northeast part of Fort Worth, Tarrant County. The headwaters originate 1.3 miles northwest of the Fort Worth Refinery. The stream upstream from the refinery flows southeasterly in an open channel and then through a culvert beneath the refinery. Downstream from the refinery the stream continues through a residential section southeastward for about 3.0 miles to the West Fork Trinity River. The stream decreases in altitude from approximately 635 feet above mean sea level at the headwaters above the Fort Worth Refinery to 538.5 feet at Fain Street, a distance of 3.6 miles.

Little Fossil Creek (fig. 3) is located north of downtown Fort Worth in north-central Tarrant County. The headwaters originate in a rural area northwest of Saginaw, and the stream flows in an open channel southeasterly past Saginaw, through the Greater Southwest Corporation Industrial Park, and into the northeastern part of Fort Worth. The stream continues its southeasterly course from Fort Worth through Haltom City to Big Fossil Creek, and thence to the West Fork Trinity River (fig. 1). The creek decreases in altitude from approximately 810 feet above mean sea level at the headwaters north of Saginaw to 550 feet at Mesquite Street in northeast Fort Worth, a distance of 9.3 miles.

HYDROLOGIC INSTRUMENTS

Instruments to collect rainfall, runoff, and flood-profile data in the Sycamore Creek study area consist of three recording rain gages, one continuous-record stream-gaging station, and 16 flood-profile partial-record gages.

Instruments to collect rainfall and runoff data in the Sycamore Creek tributary study area consist of two recording rain gages and two continuous-record stream-gaging stations.

Instruments to collect rainfall, runoff, and flood-profile data in the Dry Branch study area consist of two recording rain gages, one continuous-record stream-gaging station, one crest-stage partial-record station, and 16 flood-profile partial-record gages.

Instruments to collect rainfall, runoff, and flood-profile data in the Little Fossil Creek study area consist of three recording rain gages, one continuous-record stream-gaging station, one crest-stage partial-record station, and 11 flood-profile partial-record gages.

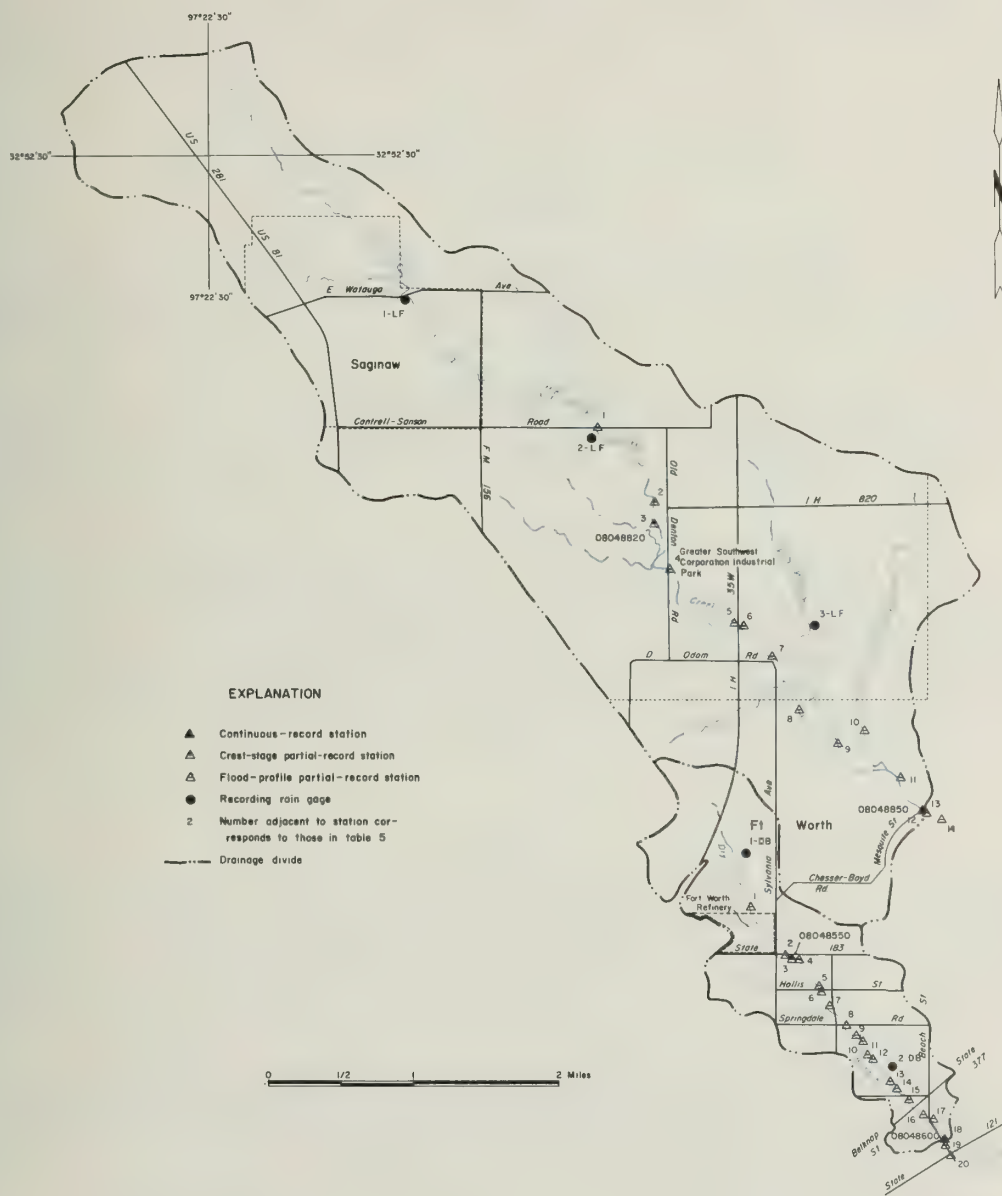


FIGURE 3.—Locations of hydrologic-instrument installations in the Dry Branch and Little Fossil Creek study areas

In the Little Fossil Creek and Dry Branch Basins, three supplemental crest-stage flood-profile stations are located downstream from the study areas to provide additional floodflow elevations in the vicinity of the gaging stations.

Locations of hydrologic instruments in the study areas are shown on figures 2 and 3. Pertinent individual station information is included in the section "Compilation and analysis of data".

DATA COLLECTION AND EXPLANATION

Rainfall

Ten recording rain gages distributed throughout the four study areas provide a measure of total rainfall and are used to define rainfall intensities.

In this report, rainfall is compiled on a daily basis to facilitate comparison with the National Weather Service records, comparisons among study-area rain gages, and potential use in mathematical rainfall-runoff models.

Weighted-mean rainfall for a study area is determined by the Thiessen method using gages located within a particular drainage boundary. In some areas, the Thiessen weight values are nearly equal and rainfall amounts are arithmetically averaged. Equations used to compute weighted-mean rainfall on the area above each continuous-record stream-gaging or crest-stage partial-record station are summarized in table 2.

Runoff

Runoff data are based on discharge measurements and stage records at seven stream-gaging locations and peak elevations at 46 flood-profile locations. Of the seven stream-gaging locations, five are continuous-record stream-gaging stations and two are crest-stage partial-record gaging stations.

A water-stage recorder at a continuous-record stream-gaging station records the full range in stage, which together with measurements of streamflow allows the computation of total runoff at the station.

A water-stage recorder at a crest-stage partial-record gaging station records only stages above an arbitrary or selected elevation, which together with measurements of streamflow allows computation of the upper part of the runoff hydrograph. These stations are located at sites where limited streamflow data collected systematically over a period of years are needed.

Table 2.--Equations used to compute weighted-mean rainfall on the area above each continuous-record stream-gaging or crest-stage partial-record station.

Station	USGS gage identification No.	Weighted-mean rainfall equation
Sycamore Creek at Interstate Highway 35-W	08048520	$(0.33)(1-SC) + (0.48)(2-SC) + (0.19)(3-SC)$
Sycamore Creek tributary above Seminary South Shopping Center	08048530	$(0.78)(1-ST) + (0.22)(2-ST)$
Sycamore Creek tributary at Interstate Highway 35-W	08048540	$(0.56)(1-ST) + (0.44)(2-ST)$
Seminary South Shopping Center	--	$(1.00)(2-ST)$
Dry Branch at Blandin Street	08048550	$(1.00)(1-DB)$
Dry Branch at Fain Street	08048600	$(0.50)(1-DB) + (0.50)(2-DB)$
Little Fossil Creek at Interstate Highway 820	08048820	$(0.76)(1-LF) + (0.24)(2-LF)$
Little Fossil Creek at Mesquite Street	08048850	$(0.34)(1-LF) + (0.25)(2-LF) + (0.41)(3-LF)$

Note: For locations of stations by the U.S. Geological Survey Identification Number, see figs. 2 and 3. Rain gage designations are SC-Sycamore Creek area, ST-Sycamore Creek tributary area, DB-Dry Branch area, and LF-Little Fossil Creek area; for rain gage locations, see figs. 2 and 3.

A crest-stage flood-profile gage, located at selected sites along the stream or on tributaries, records the peak water stage reached during the passage of a flood.

The purpose of the two continuous-record stream-gaging stations, located in the Sycamore Creek tributary basin (fig. 2), is to (1) collect hydrologic data from the residential-park area west of Seminary South Shopping Center (upstream station), and (2) collect hydrologic data from both the residential-park area and the shopping center (downstream station). The difference in runoff between these two stations equals the runoff from the impervious area of the shopping center. Sustained low-flow occurs as a result of industrial effluents.

Information on monthly runoff (volumetric) and selected individual storm runoff from the shopping center is presented in later sections of this report. Analyses of an individual storm at the shopping center requires routing the discharge shown by the upstream hydrograph to the downstream station by using estimated travel times of 5 to 50 minutes (depending upon upstream discharge). It is assumed that little or no attenuation of upstream discharge occurs. The routed discharges are deducted from the downstream discharges; these differences equal the discharges (estimated) from the impervious area of the shopping center. Table 1 presents a summary of rainfall-runoff relationships for the current year at Seminary South Shopping Center.

SUMMARY OF DATA FOR THE 1971 WATER YEAR

Each year, storm events that will be useful in achieving the objectives of the study are selected for detailed rainfall-runoff analysis. The event during which the annual maximum discharge occurs is usually included in the selection. A digital computer was used this year to aid in the processing of some of the individual station storm data.

During the 1971 water year, storms selected for analysis occurred on July 29-30 in the Sycamore Creek Basin; May 27, July 28, 29, and August 14 in the Sycamore Creek tributary basin; October 23, May 29, and August 15-16 in the Dry Branch Basin; May 29-30, August 6 and 15 in the Little Fossil Creek Basin.

Summaries of storm rainfall-runoff data for selected individual storms at streamflow stations and crest-stage partial-record stations are given in tables 3 and 4, respectively. Detailed storm rainfall and runoff records, hydrographs, and mass curves for each station are shown in the section "Compilation and analysis of data".

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data at streamflow stations,
water year 1971.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 17.7 sq mi)								
July 29-30, 1971	1.25	1.53	0.64	1.14	1.49	0.41	0.27	2,100
08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex. (Drainage area, 0.97 sq mi)								
May 27, 1971	2.0	0.85	0.57	0.75	0.80	0.12	0.14	250
July 28, 1971	6.5	1.40	.60	.96	1.09	.29	.21	308
July 29, 1971	1.5	1.46	.72	1.10	1.40	.53	.36	400
Aug. 14, 1971	1.75	.73	.35	.37	.67	.12	.16	94
	.75	.80	.49	.79	.80	.21	.26	281

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT
ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data at streamflow stations,
water year 1971.--Continued

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 1.35 sq mi)								
May 27, 1971	2.25	0.94	0.70	0.81	0.88	0.29	0.31	531
July 28, 1971	6.5	1.48	.62	1.00	1.16	.47	.32	619
July 29, 1971	4.0	1.60	.79	1.21	1.53	.83	.52	780
Aug. 14, 1971	2.25	.62	.28	.30	.60	.17	.27	210
	.75	.69	.52	.67	.69	.28	.41	451
Seminary South Shopping Center (Drainage area, 0.38 sq mi)								
May 27, 1971	2.0	1.15	0.90	0.99	1.09	0.71	0.62	500
July 28, 1971	6.25	1.70	.73	1.23	1.39	.92	.54	370
July 29, 1971	1.5	1.95	.96	1.50	1.86	1.60	.82	427

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data at streamflow stations,
water year 1971.--Continued

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048600 Dry Branch at Fain Street, Fort Worth, Tex. (Drainage area, 2.15 sq mi)								
Oct. 23, 1970	1.75	0.93	0.53	0.72	0.84	0.17	0.18	111
May 29, 1971	8.5	1.34	.40	.70	.82	.26	.19	136
Aug. 15-16, 1971	2.0	1.71	.63	1.10	1.52	.45	.26	264
08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex. (Drainage area, 12.3 sq mi)								
May 29-30, 1971	13.5	1.72	0.46	0.81	0.98	0.14	0.08	165
Aug. 15, 1971	2.25	.64	.30	.44	.60	.15	.24	603

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 4.--Storm rainfall-runoff data at crest-stage partial-record stations, water year 1971.

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (cfs)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048550 Dry Branch at Blandin Street, Fort Worth, Tex. (Drainage area, 1.08 sq mi)								
Oct. 23, 1970	1.75	1.12	0.79	0.94	1.05	-	-	121
May 29, 1971	7.5	1.40	.52	.66	.81	-	-	126
Aug. 15, 1971	1.75	1.54	.75	1.19	1.50	-	-	218
08048820 Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. (Drainage area, 5.64 sq mi)								
May 29, 1971	13.5	1.94	0.46	0.84	1.11	-	-	258
Aug. 6, 1971	3.25	.40	.09	.14	.24	-	-	125

Yearly rainfall and runoff for the 1971 water year for the study areas with continuous record-gaging stations in the Fort Worth metropolitan area are summarized in the following table:

Station	Yearly mean rainfall (inches)	Yearly runoff (inches)	Ratio of runoff to rainfall
Sycamore Creek at Inter- state Highway 35-W (08048520)	21.68	1.74	0.08
Sycamore Creek tributary above Seminary South Shopping Center (08048530)	22.59	4.45	.20
Sycamore Creek tributary at Interstate Highway 35-W (08048540)	22.30	6.49	.29
Seminary South Shopping Center	21.57	11.67	.54
Dry Branch at Fain Street (08048600)	19.48	4.03	.21
Little Fossil Creek at Mes- quite Street (08048850)	19.09	.98	.05

NOTE: See "Remarks" paragraph of station descriptions in the section "Compilation and analysis of data" for information about regulation or diversion.

Other data, including daily and monthly rainfall and daily and monthly runoff for the 1971 water year, are included in the section "Compilation and analysis of data". In addition, flood-profile data for storms during the water year are listed in table 5.

Table 5.--Peak elevations at flood-profile partial-record and continuous-record stations, water year 1971.

Map No.	Station No.	Station name and location of floodmark	Drainage area (sq mi)	Distance above mouth (miles)	Flood elevations					
					Oct. 23, 1970	Apr. 17 or 18, 1971 2/	May 29, 1971 3/	July 29, 1971	Aug. 14, 1971	Aug. 15, 1971
		<u>Sycamore Creek Basin</u>								
1		Sycamore Creek at Sycamore School Road-UsLb	-	1.5	<690.28	<690.28	<690.28	<690.28	-	-
2		Sycamore Creek near Intersection of Trimble Drive and Hallmark Drive (Hallmark Addition)-Lb	-	2.5	<673.79	<673.79	<673.79	<673.79	-	-
3		Sycamore Creek at Hemphill Street-UsRb	-	2.1	<648.05	<648.05	<648.05	<648.05	-	-
4		Sycamore Creek tributary at Sycamore Creek Road-UsLb	-	-	<666.69	<666.69	665.49	671.78	-	-
5	08048520+	Sycamore Creek at Interstate Highway 35-W-UsLb 1/	17.7	6.7	631.70	631.74	632.54	636.16	-	-
6		Sycamore Creek at Interstate Highway 820-DsRb	-	8.3	<626.53	<626.53	625.13	629.13	-	-
7		Sycamore Creek at Oak Grove Road-DsLb	-	7.7	<615.53	<615.53	<615.53	617.95	-	-
8		Sycamore Creek below Missouri-Pacific RR-1,500 ft DsLb	-	-	<604.74	<604.74	604.14	607.49	-	-
9		Sycamore Creek at Seminary Drive-UsRb	-	6.3	<587.06	<587.06	585.46	587.95	-	-
10		Sycamore Creek at Butler Street (extension)-225 ft DsLb	-	5.5	<570.06	<570.06	<570.06	573.03	-	-
11		Sycamore Creek at Riverside Drive-UsRb	-	4.9	<563.20	<563.20	<563.20	<563.20	-	-
12		Sycamore Creek at Glen Garden Drive-UsRb	-	4.3	<553.08	<553.08	<553.08	<553.08	-	-
13		Sycamore Creek in Cobb Park midway between Glen Garden Drive and U.S. Highway 287-Lb	-	3.7	<545.32	<545.32	<545.32	<545.32	-	-
14		Sycamore Creek at U.S. Highway 287-DsRb	-	3.0	<535.42	<535.42	535.42	536.45	-	-
15		Sycamore Creek at West Rosedale Street-DsRb	-	2.2	<525.68	<525.68	<525.68	523.04	-	-
16		Sycamore Creek at Vickery Boulevard-UsLb	-	1.7	<517.23	<517.23	<517.23	518.39	-	-
17		Sycamore Creek at Lancaster Avenue-UsLb	-	.9	<506.89	<506.89	<506.89	505.42	-	-
		<u>Dry Branch Basin</u>								
1		Dry Branch at Texas and Pacific RR spur-Rb	-	*3.41	<596.97	<596.97	<596.97	<596.97	-	<596.97
2		Dry Branch at Grace Street-DsLb	-	*2.5e	<586.79	<586.79	<586.79	<586.79	-	<586.79
3	08048550+	Dry Branch at Blandin Street-24 ft UsLb	1.00	*2.32	586.27	585.33	586.32	584.86	-	587.11
4		Dry Branch at Blandin Street-DsLb	-	*.80	<586.11	<586.11	<586.11	<586.11	-	<586.11
5		Dry Branch at Hollis Street-60 ft UsRb	-	*2.52	<582.10	<582.10	582.46	582.46	-	<582.46
6		Dry Branch at Hollis Street-10 ft DsLb	-	*2.49	<580.63	<580.63	<580.63	<580.63	-	<580.63
7		Dry Branch at Selma Street-120 ft UsLb	-	*2.38	a/	<578.79	579.25	<578.79	-	<578.79
8		Dry Branch at Springdale-DsRb	-	*2.18	<568.36	<568.36	<568.36	<568.36	-	<568.36
9		Dry Branch at Bonnie Brae-80 ft UsLb	-	*2.07	<567.06	<567.06	<567.06	<567.06	-	<567.06
10		Dry Branch between Bonnie Brae and Aster Court-100 ft UsRb	-	*1.08	<564.92	<564.92	<564.92	<564.92	-	<564.92
11		Dry Branch at Carnation Street-20 ft UsRb	-	*1.89	<562.04	<562.04	563.12	<562.04	-	<562.04
12		Dry Branch at Carnation Street-100 ft DsLb	-	*1.85	<561.47	<561.47	562.48	<561.57	-	<561.57
13		Dry Branch at Robinwood Street-150 ft UsRb	-	*1.65	<557.68	<557.68	559.34	<557.68	-	<557.68
14		Dry Branch between Robinwood and Yucca Streets-150 ft UsLb	-	*1.56	a/	<556.16	<556.16	<556.16	-	<556.16
15		Dry Branch between Yucca and Belknap Streets-Rb	-	*1.46	<553.46	<553.46	554.01	<553.46	-	<553.46
16		Dry Branch at Beach Street-UsLb	-	*1.00	<542.70	<542.70	543.98	<542.70	-	<542.70
17		Dry Branch at Beach Street-DsRb	-	*1.23	<542.50	<542.50	542.80	<542.50	-	<542.50
18	08048600+	Dry Branch at Pain Street-UsRb	2.15	*1.06	<540.11	<540.11	540.65	539.87	-	<539.87
19		Dry Branch at Pain Street-DsRb	-	*1.01	<539.06	<539.06	539.51	<539.06	-	<539.06
20		Dry Branch at State Highway 121-UsLb	-	*.99	<537.14	<537.14	538.98	<537.14	-	<537.14
		<u>Little Fossil Creek Basin</u>								
1		Little Fossil Creek at Cantrell-Samson Roads-DsLb	-	8.42	<636.88	<636.88	<636.88	<636.88	-	<636.88
2		Little Fossil Creek at Interstate Highway 820-UsRb	-	7.73	<616.60	<616.60	<616.60	<616.60	-	<616.60
3	08048820+	Little Fossil Creek at Interstate Highway 820-DsRb	5.64	7.55	611.83	612.04	612.75	<611.29	-	<611.29
4		Little Fossil Creek at Old Denton Road-DsRb	-	7.14	<602.46	<602.46	<602.46	<602.46	-	<602.46
5		Little Fossil Creek at Interstate Highway 35-W-UsRb	-	6.35	<591.16	<591.16	<591.16	<591.16	-	<591.16
6		Little Fossil Creek at Interstate Highway 35-W-DsLb	-	6.26	<588.87	<588.87	<588.87	<588.87	-	<588.87
7		Little Fossil Creek at Watauga (Sylvania Avenue)-UsLb	-	5.93	<584.29	<584.29	<584.29	<584.29	-	<584.29
8		Little Fossil Creek midway between Watauga Road and St. Louis Southwestern RR-Rb	-	5.50	<577.56	<577.56	<577.56	<577.56	-	<577.56
9		Little Fossil Creek at St. Louis Southwestern RR-DsRb	-	5.12	<568.32	<568.32	<568.32	<568.32	-	<568.32
10		Little Fossil Creek tributary at St. Louis Southwestern RR-DsRb	-	-	<573.80	<573.80	<573.80	<573.80	-	<573.80
11	08048850+	Little Fossil Creek at Texas and Pacific RR-30 ft DsRb	-	4.54	<559.43	<559.43	<559.43	<559.43	-	<559.43
12		Little Fossil Creek at Mesquite Street-Rb	12.3	4.24	551.49	552.16	552.37	551.04	-	<551.04
13		Little Fossil Creek at Beach Street-UsRb	-	4.20	<553.85	<553.85	<553.85	<553.85	-	<553.85
14		Little Fossil Creek at Beach Street-DsRb	-	4.11	<549.20	<549.20	<549.20	<549.20	-	<549.20

* Distances based on consultant's report by Knowlton-Ratliff-English, 1967.

† Continuous-record station.

* Crest-stage partial-record station.

< Less than elevation shown.

a Elevation unknown; gage inoperative or destroyed.

Ds Downstream.

Lb Left bank.

Rb Right bank.

Us Upstream.

1/ Station established Nov. 13, 1969.

2/ Dates of peaks are Apr. 16 in Dry Branch Basin and Apr. 17-18 in Sycamore Creek and Little Fossil Creek Basins.

3/ A maximum elevation of 632.80 ft occurred on June 21 at station 08048520, while maximum elevations at all other sites are considered to have occurred on May 29.

NOTE: Flood-profile partial-record station established during September 1970 in Sycamore Creek Basin (no significant peaks during September 1970).

COMPI LATION AND ANALYSIS OF DATA

TRINITY RIVER BASIN

08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°39'55", long 97°19'16", Tarrant County, on left bank at upstream side of bridge on frontage road on upstream side of Interstate Highway 35-W, 5.8 miles south of Fort Worth City Hall, and 8.9 miles upstream from mouth.

DRAINAGE AREA.--17.7 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,100 cfs July 29 (elevation, 636.16 ft); no flow at times.

Period of record: Maximum discharge, 2,100 cfs July 29, 1971 (elevation, 636.16 ft); no flow at times.

Flood of May 6, 1969, reached an elevation of 640.1 ft, from floodmarks (discharge not determined). Flood in 1908 reached an elevation of 645.9 ft (discharge not determined), and flood in 1938 reached an elevation of 644.4 ft (discharge not determined), from information by State Highway Department.

REMARKS.--Records good. Flow is slightly affected by several small farm ponds on tributaries above station. At times, low flow may be sustained by effluents from commercial establishments. Two recording rain gages are operated in basin above this station, and one recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.35	.07	.35	.01	.45	.04	.03	.97	.50	.81	.23
2	.12	.07	.07	.12	.01	.35	.04	.03	.62	.53	.54	.03
3	.12	.02	.07	1.5	.01	.45	.03	.02	.35	1.1	.17	.25
4	.07	.02	.07	.87	6.8	.35	.02	.01	.27	.30	.17	.02
5	.07	.02	.12	.26	.87	.26	.03	.01	.23	.10	4.5	J
6	.12	.02	.04	.18	.35	.26	.03	4.9	.16	.34	2.3	1
7	.12	.01	.04	.12	.07	.12	.04	4.2	.11	.03	.49	0
8	.26	.01	.07	.12	.04	.12	.03	.40	.06	.82	.25	-
9	.12	.02	.12	.18	.04	.14	.08	.08	.06	.04	.09	-
10	.07	.04	.12	.26	.04	.29	.06	.11	.05	.31	.05	0
11	17	.02	.12	.18	.07	.35	.05	.05	.05	0	.04	0
12	4.4	.02	.04	.26	.07	.23	.26	.03	.06	0	.03	0
13	1.0	2.5	.04	.35	.12	.05	.03	.03	.05	0	22	0
14	.45	1.2	.04	.26	.45	.03	.03	.03	.13	0	39	0
15	.18	.18	1.0	.18	.35	.03	.02	.03	.15	0	3.3	0
16	.07	.04	.57	.18	.35	.08	32	.01	.10	0	.84	0
17	.02	.02	.26	.07	.26	.05	31	0	.05	0	.24	0
18	.02	.04	.12	.07	5.1	.06	22	0	.03	.94	.11	0
19	.04	.04	.07	.07	2.2	.10	2.2	.03	.02	3.2	.05	0
20	.02	.02	.04	.07	.57	.05	8.9	.03	.03	4.0	.04	0
21	.02	.01	.12	.07	5.4	.05	2.8	.03	83	.44	.02	0
22	.02	.01	.18	.07	1.0	.03	1.3	.04	5.4	.29	.02	5.2
23	22	.02	.12	.26	.57	.04	.45	.04	1.7	.49	0	15
24	1.7	.02	.04	.07	.45	.05	.23	.04	.63	3.1	11	1.9
25	.26	.04	.02	.07	6.5	.03	.13	.03	.25	2.4	19	8.3
26	.18	.04	.02	.07	2.0	.04	.08	.03	.16	.74	1.7	.83
27	.35	.04	.02	.07	.71	.04	.05	17	.11	1.9	1.1	.25
28	.12	.07	.04	.07	.45	.05	.04	1.3	.16	30	.27	.11
29	.07	.07	.35	.04	-----	.04	.04	89	.24	178	.09	0
30	.04	.07	12	.02	-----	.04	.04	6.3	.57	18	.05	.24
31	.26	-----	.87	.01	-----	.03	-----	2.0	-----	2.1	.04	-----
TOTAL	49.64	5.05	16.87	6.47	34.86	4.26	102.75	125.84	95.77	249.07	108.31	31.81
MEAN	1.60	.17	.54	.21	1.25	.14	3.40	4.06	3.19	8.03	3.49	1.06
MAX	22	2.5	12	1.5	6.8	.45	32	89	83	178	39	11
MIN	.02	.01	.02	.01	.01	.03	.02	0	.02	0		
CFSM	.09	.01	.03	.01	.07	.008	.19	.23	.18	.45	.20	.06
IN.	.10	.01	.04	.01	.07	.008	.21	.26	.20	.52	.23	.07
AC-FT	98	10	33	13	69	8.5	202	250	190	494	215	63
CAL YR 1970	TOTAL	3,316.17	MEAN	9.09	MAX	315	MIN	0	CFSM	.51	IN	6.97
WTR YR 1971	TOTAL	829.99	MEAN	2.27	MAX	178	MIN	0	CFSM	.13	IN	1.74
									AC-FT	6,580		
									AC-FT	1,650		

PEAK DISCHARGE (BASE, 800 CFS).--July 29 (2115) 2,100 cfs (636.16 ft).

TRINITY RIVER BASIN

08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex.

LOCATION.--Lat 32°41'08", long 97°19'44", Tarrant County, on right bank near entrance to culvert under Missouri, Kansas, and Texas Railroad (revised), 0.2 mile northeast of intersection of Hemphill Street and Seminary Drive in Fort Worth, 1.8 miles upstream from mouth, and 4.5 miles south of Fort Worth City Hall.

DRAINAGE AREA.--0.97 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and culvert control. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 400 cfs July 29 (elevation, 654.20 ft); minimum daily, 0.01 cfs at times.

Period of record: Maximum discharge, 400 cfs July 29, 1971 (elevation, 654.20 ft); no flow at times.

Maximum stage since 1966, about 656.0 ft in August 1966 (discharge not determined), from information by local resident.

REMARKS.--Records fair. Low flow sustained by effluent from commercial establishments above station. One recording rain gage is operated in basin above station, and one is located below station in Seminary South Shopping Center. Records of precipitation and hydrologic data for selected storms are published elsewhere in supplementary basic-data reports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.08	.04	.01	.01	.08	.01	.02	.01	.17	.07
2	.01	.04	.06	.04	.04	.19	.04	.01	.02	.93	.14	.07
3	.01	.05	.09	.86	.06	.18	.06	.01	.02	.04	.14	.05
4	.01	.05	.06	.03	2.1	.01	.06	.01	.02	.01	.18	.05
5	.01	.06	.07	.04	.04	.02	.03	.03	.02	.37	1.0	.06
6	.01	.02	.05	.03	.05	.02	.04	1.6	.02	.01	.09	.06
7	.01	.01	.06	.03	.10	.01	.04	.02	.02	.01	.06	.07
8	.10	.01	.07	.05	.08	.02	.05	.01	.02	.01	.06	.04
9	.01	.01	.08	.05	.09	.01	.04	.02	.01	.01	.06	.01
10	.01	.03	.12	.02	.08	.01	.06	.01	.02	.01	.06	.01
11	3.3	.03	.13	.01	.17	.02	.02	.01	.02	.01	.06	.01
12	.05	.01	.04	.14	.10	.01	.03	.01	.01	.01	.06	.01
13	.01	1.1	.02	.16	.15	.01	.03	.01	.13	.01	3.6	.14
14	.05	.03	.02	.19	.12	.02	.02	.01	.02	.01	8.8	.03
15	.01	.06	.63	.16	.12	.02	.03	.01	.01	.01	.16	.01
16	.01	.18	.01	.16	.13	.02	6.6	.01	.01	.02	.07	.01
17	.05	.01	.01	.16	.06	.02	3.5	.01	.01	.59	.04	.01
18	.08	.01	.01	.19	.84	.47	.24	.10	.01	.01	.02	.01
19	.01	.02	.01	.18	.01	.03	.09	.02	.01	1.7	.02	.03
20	.05	.03	.01	.01	.01	.04	1.0	.01	.36	.06	.03	.01
21	.01	.07	.01	.01	2.2	.06	.05	.01	4.5	.07	.08	.01
22	.01	.07	.01	.01	.03	.08	.04	.01	.01	.01	.12	3.0
23	3.1	.05	.01	.01	.05	.06	.02	.01	.01	.15	.09	2.4
24	.01	.08	.01	.01	.12	.06	.02	.01	.01	.87	2.5	.07
25	.01	.08	.01	.01	1.4	.06	.02	.01	.01	.02	2.9	1.7
26	.01	.08	.01	.01	.02	.05	.02	.01	.01	.12	.31	.07
27	.01	.08	.01	.22	.01	.05	.02	3.1	.01	.14	.11	.05
28	.04	.08	.05	.18	.06	.06	.03	.01	.01	7.5	.08	.02
29	.02	.09	.01	.01	-----	.06	.24	8.9	.27	14	.06	.02
30	.04	.09	2.2	.02	-----	.08	.02	.07	.01	.55	.05	.02
31	.09	-----	.09	.01	-----	.04	-----	.04	-----	.22	.05	-----
TOTAL	7.16	2.56	4.05	3.05	8.25	1.84	12.54	14.11	5.63	27.49	21.17	8.12
MEAN	.23	.085	.13	.098	.29	.059	.42	.46	.19	.89	.68	.27
MAX	3.3	1.1	2.2	.86	2.2	.47	6.6	8.9	4.5	14	8.8	3.0
MIN	.01	.01	.01	.01	.01	.01	.02	.01	.01	.01	.02	.01
CFSM	.24	.09	.13	.10	.30	.06	.43	.47	.20	.92	.70	.28
IN.	.27	.10	.16	.12	.32	.07	.48	.54	.22	1.05	.81	.31
AC-FT	14	5.1	8.0	6.1	16	3.7	25	28	11	55	42	16
GAL YR 1970	TOTAL 240.04	MEAN .66	MAX 23	MIN 0	CFSM .68	IN 9.21	AC-FT 476					
WTR YR 1971	TOTAL 115.97	MEAN .32	MAX 14	MIN .01	CFSM .33	IN 4.45	AC-FT 230					

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
5-27	0355	652.79	250	7-28	1225	653.28	308
5-29	0720	653.05	283	7-29	1950	654.20	400
				8-14	1120	653.03	281

TRINITY RIVER BASIN

08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°14'18", long 97°19'11", Tarrant County, on left bank at culvert on downstream side of access road to Interstate Highway 35-W, 0.3 mile north of Seminary Drive in Fort Worth, 1.2 miles upstream from mouth, and 4.3 miles south of Fort Worth City Hall.

DRAINAGE AREA.--1.35 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 780 cfs July 29 (elevation, 625.84 ft); minimum daily, 0.01 cfs for many days.

Period of record: Maximum discharge, 780 cfs July 29, 1971 (elevation, 625.84 ft); minimum daily, 0.01 cfs for many days.

Maximum elevation since 1969, 627.2 ft (backwater from culvert), from floodmarks, in May 1969 (discharge not determined).

Flood in August 1966 probably equaled or exceeded the flood of May 1969, based on information at upstream station 08048530.

REMARKS.--Records fair. Records include runoff from a shopping center. Low flows sustained by effluents. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.13	.13	.08	.01	.02	.06	.03	.09	.01	.08	.06
2	.11	.08	.13	.08	.01	.07	.04	.02	.06	.60	.06	.06
3	.11	.12	.13	2.1	.01	.16	.03	.02	.04	.03	.06	.08
4	.11	.07	.12	.09	3.2	.04	.05	.02	.06	.01	.09	.04
5	.11	.07	.05	.08	.02	.05	.03	.07	.02	.60	1.6	.04
6	.10	.04	.02	.06	.02	.09	.03	3.2	.02	.01	.08	.04
7	.11	.04	.04	.09	.02	.09	.03	.01	.09	.01	.02	.03
8	.29	.04	.05	.11	.02	.07	.05	.01	.02	.04	.02	.03
9	.11	.05	.09	.08	.02	.06	.03	.01	.04	.91	.03	.02
10	.11	.09	.12	.06	.02	.03	.02	.01	.07	.04	.03	.03
11	7.8	.11	.17	.07	.10	.03	.04	.01	.07	.05	.03	.03
12	.10	.08	.05	.14	.02	.03	.04	.01	.02	.07	.03	.03
13	.04	1.7	.05	.15	.04	.06	.05	.02	.39	.17	6.9	.17
14	.07	.06	.04	.19	.01	.04	.16	.01	.03	.17	16	.36
15	.02	.04	1.5	.14	.01	.06	.03	.01	.03	.18	.16	.06
16	.02	.14	.04	.18	.01	.06	14	.01	.01	.21	.10	.07
17	.13	.03	.04	.20	.01	.05	8.6	.01	.04	.51	.19	.04
18	.06	.04	.05	.22	1.7	.83	.02	.02	.08	.02	.11	.04
19	.02	.05	.04	.16	.03	.03	.07	.01	.01	4.3	.11	.15
20	.04	.05	.06	.05	.02	.03	.52	.01	.08	.20	.09	.02
21	.01	.06	.07	.05	2.5	.03	.07	.01	12	.20	.09	.03
22	.02	.07	.07	.05	.03	.04	.06	.01	.02	.06	.13	5.2
23	6.8	.03	.05	.04	.04	.03	.04	.01	.09	.43	.07	4.7
24	.02	.06	.05	.03	.09	.04	.06	.01	.03	1.4	7.0	.28
25	.01	.07	.04	.03	1.8	.04	.02	.02	.01	.06	6.0	4.8
26	.03	.07	.04	.02	.05	.04	.03	.06	.01	.20	.24	.12
27	.01	.08	.04	.09	.03	.03	.04	10	.24	.55	.08	.08
28	.02	.13	.07	.06	.07	.03	.06	.05	.03	17	.06	.05
29	.02	.08	.06	.01	-----	.04	1.4	21	.12	30	.04	.02
30	.10	.12	5.3	.01	-----	.05	.06	.02	.02	.54	.05	.02
31	.16	-----	.15	.01	-----	.05	-----	.03	-----	.12	.05	-----
TOTAL	16.74	3.80	8.86	4.73	9.91	2.32	25.74	34.74	13.84	58.70	39.60	16.40
MEAN	.54	.13	.29	.15	.35	.075	.86	1.12	.46	1.89	1.28	.55
MAX	7.8	1.7	5.3	2.1	3.2	.83	14	21	12	30	16	5.2
MIN	.01	.03	.02	.01	.01	.02	.02	.01	.01	.01	.02	.02
CFSM	.40	.10	.21	.11	.26	.06	.64	.83	.34	1.40	.95	.41
IN.	.46	.10	.24	.13	.27	.06	.71	.96	.38	1.62	1.09	.45
AC-FT	33	7.5	18	9.4	20	4.6	51	69	27	116	79	33

CAL YR 1970	TOTAL	391.97	MEAN	1.07	MAX	36	MIN	.01	CFSM	.79	IN	10.80	AC-FT	777
WTR YR 1971	TOTAL	235.38	MEAN	.64	MAX	30	MIN	.01	CFSM	.47	IN	6.49	AC-FT	467

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-23	0950	622.43	248	7-28	1230	624.13	619
4-16	1515	621.19	209	7-29	1950	625.84	780
5-27	0350	623.47	531	8-14	1120	622.94	451
5-29	0720	623.26	499	8-24	1635	622.20	340
6-21	1135	622.03	314	9-25	0400	621.68	268

TRINITY RIVER BASIN

08048600 Dry Branch at Fain Street, Fort Worth, Tex.

LOCATION.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft upstream from culvert on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles upstream from mouth, and 2.9 miles northeast of Tarrant County Courthouse.

DRAINAGE AREA.--2.15 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 264 cfs Aug. 15 (gage height, 4.37 ft); minimum daily, 0.02 cfs June 25.
Period of record: Maximum discharge, 338 cfs May 30, 1970 (gage height, 4.98 ft); minimum daily, 0.02 cfs June 25, 1971.
Maximum stage since April 1964, 9.0 ft in April 1966 at upstream side of Fain Street culvert, from information by local resident (discharge not determined).

REMARKS.--Records good above 1 cfs and fair below. Low flow sustained by effluent from commercial establishments and industry above station. Two recording rain gages are operated in basin above station.

REVISIONS.--WRD Texas 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.08	.08	.22	.13	.22	.09	.13	.13	.05	.08	.13
2	.13	.08	.09	.22	.13	.92	.08	.13	.13	.25	.08	.13
3	.12	.08	.08	2.4	.13	1.1	.10	.13	.13	.03	.17	.13
4	.08	.08	.08	.31	4.8	.40	.11	.08	.10	.03	.20	.13
5	.08	.08	.08	.22	.43	.22	.13	.85	.05	.03	.30	.13
6	.08	.08	.08	.22	.38	.14	.13	2.7	.05	.03	1.7	.13
7	.08	.08	.08	.22	.38	.13	.18	.41	.05	.03	.63	.13
8	.19	.08	.07	.22	.38	.13	.31	.13	.08	.03	.11	.13
9	.08	.08	.08	.22	.38	.13	.20	.13	.08	.03	.08	.13
10	.08	.08	.07	.22	.38	.13	.13	.08	.13	.03	.08	.13
11	4.2	.08	.07	.25	.38	.13	.13	.05	.14	.03	.13	.13
12	.50	.09	.08	.39	.31	.13	.08	.09	.13	.13	.13	.13
13	.08	1.6	.08	2.2	.25	.13	.13	.08	.13	.13	3.8	.13
14	.08	.39	.08	.24	.38	.13	.38	.08	.34	.17	13	.13
15	.08	.13	.50	.22	.38	.08	.38	.08	.22	.18	25	.13
16	.08	.13	.16	.18	.49	.08	2	.11	.22	.13	1.0	.13
17	.08	.13	.13	.13	.38	.08	10	.13	.22	.21	.03	.13
18	.08	.13	.11	.13	.62	.40	5.4	.13	.13	.13	.03	.13
19	.08	.13	.08	.13	.24	.08	.48	.08	.13	.52	.03	.13
20	.08	.13	.08	.13	.16	.08	3.2	.13	1.3	.15	.03	.13
21	.08	.20	.08	.13	5.4	.08	.20	.13	2.8	.66	.03	.13
22	.08	.22	.08	.13	.26	.08	.13	.13	.05	.12	.03	4.9
23	9.9	.23	.08	.13	.22	.08	.31	.13	.04	4.0	.03	6.9
24	.24	.26	.08	.13	.22	.08	.38	.10	.03	1.3	.89	.38
25	.11	.22	.08	.17	1.9	.08	.15	.08	.02	.12	1.9	2.1
26	.08	.22	.08	.22	.37	.11	.13	.08	.03	.05	.23	.23
27	.08	.22	.08	.18	.18	.08	.10	.4.8	.03	.57	.19	.20
28	.08	.40	.09	.13	.75	.08	.10	.18	.37	1.5	.14	.07
29	.08	.16	.13	.13	-----	.08	.13	15	1.5	5.2	.13	.06
30	.08	.11	4.9	.13	-----	.08	.13	.36	.08	2.2	.13	.05
31	.08	-----	.30	.13	-----	.14	-----	.13	-----	.14	.13	-----
TOTAL	17.28	5.98	8.14	10.08	20.41	5.81	43.40	26.85	8.84	18.18	50.44	17.62
MEAN	.56	.20	.26	.33	.73	.19	1.45	.87	.29	.59	1.63	.59
MAX	9.9	1.6	4.9	2.4	5.4	1.1	20	15	2.8	5.2	25	6.9
MIN	.08	.08	.07	.13	.13	.08	.08	.05	.02	.03	.03	.05
CFSM	.26	.09	.12	.15	.34	.09	.67	.40	.13	.27	.76	.27
IN.	.30	.10	.14	.17	.35	.10	.75	.46	.15	.31	.87	.30
AC-FT	34	12	16	20	40	12	86	53	18	36	100	35
(††)	1.64	.32	.70	.41	1.23	.26	2.88	2.58	1.14	2.35	4.31	1.66

CAL YR 1970	TOTAL	514.26	MEAN	1.41	MAX	45	MIN	.05	CFSM	.66	IN	8.90	AC-FT	1,020	††	30.96
WTR YR 1971	TOTAL	233.03	MEAN	.64	MAX	25	MIN	.02	CFSM	.30	IN	4.03	AC-FT	462	††	19.48

PEAK DISCHARGE (BASE, 100 CFS)

†† Weighted-mean rainfall, in inches, based on two rain gages.

DATE	TIME	G.HT.	DISCHARGE
10-23	1045	2.86	111
5-29	0745	3.14	136
8-15	1800	4.37	264

TRINITY RIVER BASIN

08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex.

LOCATION.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles northeast of county courthouse, and approximately 4.3 miles upstream from Big Fossil Creek

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 603 cfs Aug. 15 (gage height, 5.61 ft); no flow at times.

Period of record: Maximum discharge, 1,530 cfs May 6, 1969 (gage height, 8.30 ft); no flow at times each year.

Maximum stage since 1955, 10.5 ft (at Alta Vista Road) in September 1967, from information by local resident (discharge not determined). Flood of Mar. 20, 1968, reached a stage of 8.7 ft (discharge, 1,600 cfs), from floodmarks at upstream side of Alta Vista Road Bridge.

REMARKS.--Records good. Flow slightly regulated by several small floodwater-retarding structures on tributaries above station. Low flow sustained at times by effluent from industrial park 2.6 miles upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	.17	.25	.41	.17	.51	.50	.90	.64	0	0	0
2	.57	.17	.30	.32	.17	1.4	.44	.79	.44	0	0	0
3	.57	.17	.21	2.2	.17	1.5	.38	.67	.32	0	0	0
4	.51	.17	.19	1.3	1.8	1.2	.26	.64	.21	0	0	0
5	.45	.17	.16	.66	.88	.92	.32	1.3	.17	0	0	0
6	.50	.17	.13	.39	.60	.81	.26	1.5	.10	0	7.7	0
7	.50	.17	.17	.27	.34	.58	.17	1.2	.07	0	.90	0
8	.38	.17	.17	.21	.32	.44	.21	.58	.02	0	.17	0
9	.26	.16	.24	.21	.32	.50	.26	.48	0	0	.05	0
10	.26	.13	.32	.27	.32	.57	.21	.34	0	0	.01	0
11	.51	.13	.31	.19	.23	.57	.26	.32	.07	0	0	0
12	.84	.10	.23	.17	.21	.57	.21	.19	0	0	0	0
13	.79	.67	.21	3.8	.26	.57	.13	.20	.10	0	.44	0
14	.49	1.0	.17	1.6	.24	.57	.17	.24	0	0	6.1	0
15	.38	.44	.42	.71	.21	.50	.21	.17	0	0	51	0
16	.34	.28	.43	.47	.21	.26	9.7	.16	0	0	2.0	0
17	.26	.28	.32	.32	.22	.32	17	.10	0	0	.38	0
18	.29	.26	.21	.32	.27	.32	43	.09	0	0	.17	0
19	.32	.18	.26	.26	.50	.44	3.4	.05	0	0	.17	0
20	.29	.15	.25	.26	.50	.38	3.6	.04	.17	0	.07	0
21	.26	.19	.18	.21	6.0	.26	2.3	.05	.13	0	.03	0
22	.26	.17	.17	.21	2.0	.32	1.3	.10	.17	0	.05	.11
23	9.4	.17	.17	.21	.88	.26	1.1	.21	0	.05	.01	1.6
24	2.2	.17	.17	.21	.57	.32	.90	.16	0	0	.07	.74
25	.89	.17	.16	.21	1.1	.26	.90	.13	0	0	.21	.25
26	.61	.23	.13	.21	1.5	.32	.82	.05	0	0	.54	.09
27	.38	.23	.13	.10	.74	.50	.81	1.6	0	0	.21	.05
28	.36	.19	.15	.07	.65	.44	.81	.55	.10	0	.08	.02
29	.32	.19	.14	.17	-----	.32	.83	43	0	.05	.04	0
30	.32	.19	.24	.17	-----	.32	.90	4.5	0	.13	.02	0
31	.28	-----	.79	.17	-----	.32	-----	1.1	-----	.03	0	-----
TOTAL	24.45	7.04	9.54	16.28	21.38	16.57	91.36	61.41	2.71	.26	70.42	2.86
MEAN	.79	.23	.31	.53	.76	.53	3.05	1.98	.090	.008	2.27	.095
MAX	9.4	1.0	2.4	3.8	6.0	1.5	43	43	.64	.13	51	1.6
MIN	.26	.10	.13	.07	.17	.26	.13	.04	0	0	0	0
CFSM	.06	.02	.03	.04	.06	.04	.25	.16	.007	.0007	.18	.008
IN.	.07	.02	.03	.05	.06	.05	.28	.19	.008	0	.21	.008
AC-FT	.49	.14	.19	.32	.42	.33	181	122	5.4	.5	140	5.7
(††)	1.51	.27	.64	.83	1.33	.33	3.30	3.03	.93	1.87	3.39	1.66

CAL YR 1970 TOTAL 2,397.19 MEAN 6.57 MAX 345 MIN 0 CFSM .53 IN 7.25 AC-FT 4,750 †† 29.41
WTR YR 1971 TOTAL 324.28 MEAN .89 MAX 51 MIN 0 CFSM .07 IN .98 AC-FT 643 †† 19.09

PEAK DISCHARGE (BASE, 290 CFS).--Aug. 15 (1815) 603 cfs (5.61 ft).

†† Weighted-mean rainfall, in inches, based on three rain gages.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS, WATER YEAR 1971

Station	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
08048550	Dry Branch at Blandin Street, Fort Worth, Tex. <u>a/</u>	Lat 32°47'19", long 97°18'22", Tarrant County, at culvert on Blandin Street in north Fort Worth and 2.82 miles upstream from mouth.	1.08	1969-71	8-15-71	587.16	218
08048820	Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. <u>a/</u>	Lat 32°50'22", long 97°19'22", Tarrant County, at culvert on south access road to Interstate Highway 820, 5.7 miles north of courthouse, Fort Worth, and 7.55 miles upstream from mouth.	5.64	1969-71	5-29-71	612.71	258

a/ Equipped with stage recorder.

FOSSIL CREEK SUPPLY LOG STATION												
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES												
PERIOD : 1971 WATER YEAR												
G A G F N U M B E R												
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF		
01 OCT												
05	0.01	0.02	0.04	0.01	0.00	0.01	0.02	0.21	0.14	0.03		
08	0.11	0.09	0.12	0.14	0.03	0.07	0.01	0.17	0.05	0.03		
11	0.95	0.75	0.64	0.84	0.64	0.32	0.84	0.37	0.22	0.22		
12	0.01	0.01	0.02	0.02	0.01	0.03	0.01	0.01	0.01	0.02		
14	0.04	0.03	0.00	0.02	0.01	0.03	0.01	0.02	0.03	0.02		
17	0.02	0.04	0.03	0.04	0.04	0.01	0.01	0.00	0.00	0.00		
23	0.44	0.45	0.74	0.75	0.85	1.12	0.74	0.97	1.02	1.00		
24	0.11	0.11	0.07	0.03	0.02	0.01	0.01	0.01	0.02	0.00		
WTOT	2.13	1.90	1.70	1.93	1.60	1.60	1.67	1.76	1.49	1.32		
NOV												
13	0.34	0.37	0.37	0.34	0.16	0.35	0.29	0.24	0.27	0.30		
WTOT	0.34	0.37	0.37	0.34	0.16	0.35	0.29	0.24	0.27	0.30		
DEC												
11	0.02	0.09	0.05	0.05	0.02	0.01	0.02	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.01		
15	0.25	0.26	0.20	0.22	0.22	0.11	0.07	0.11	0.11	0.07		
21	0.04	0.02	0.14	0.02	0.01	0.03	0.05	0.00	0.01	0.00		
24	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01		
29	0.04	0.04	0.03	0.04	0.02	0.01	0.01	0.02	0.01	0.06		
30	0.54	0.54	0.54	0.64	0.57	0.55	0.54	0.47	0.51	0.56		
WTOT	1.04	1.03	1.05	0.99	0.85	0.72	0.69	0.62	0.66	0.65		
CTOT	***	***	26.51	30.86	24.18	31.44	30.41	29.53	29.42	29.36		
MONTHLY TOTALS												
CUT=CALENDAR YEAR TOTALS												
SC=SYCAMORE CREEK												
ST=SYCAMORE CREEK TRIBUTARY												
DB=DRY BRANCH												
LF=LITTLE FOSSIL CREEK												

F O R T W O R T H U P M A N H Y D R O L O G Y S T U D Y												
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES												
PERIOD : 1971 WATER YEAR												
G A G E N U M B E R												
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF		
JAN												
3	0.25	0.20	0.11	0.23	0.15	0.15	0.20	0.38	0.46	0.34		
13	0.02	0.02	0.02	0.04	0.02	0.25	0.22	0.94	0.21	0.19		
TOT	0.28	0.22	0.13	0.27	0.17	0.40	0.42	1.32	0.67	0.53		
FEB												
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01		
4	0.40	0.37	0.35	0.50	0.30	0.44	0.24	0.25	0.39	0.35		
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00		
18	0.29	0.33	0.34	0.17	0.33	0.03	0.04	0.08	0.10	0.03		
21	0.40	0.40	0.21	0.43	0.23	0.64	0.40	0.75	0.72	0.53		
24	0.04	0.09	0.04	0.05	0.06	0.03	0.01	0.05	0.05	0.02		
25	0.33	0.35	0.42	0.31	0.33	0.23	0.20	0.25	0.21	0.22		
28	0.05	0.04	0.05	0.04	0.02	0.07	0.07	0.02	0.02	0.01		
TOT	1.55	1.58	1.45	1.56	1.29	1.44	1.02	1.41	1.50	1.17		
MAR												
2	0.04	0.04	0.03	0.13	0.05	0.20	0.15	0.30	0.22	0.30		
18	0.15	0.16	0.05	0.16	0.15	0.08	0.07	0.01	0.03	0.07		
31	0.03	0.01	0.02	0.02	0.04	0.02	0.01	0.01	0.01	0.02		
TOT	0.22	0.21	0.10	0.31	0.24	0.30	0.23	0.32	0.26	0.39		
MONTHLY TOTALS												

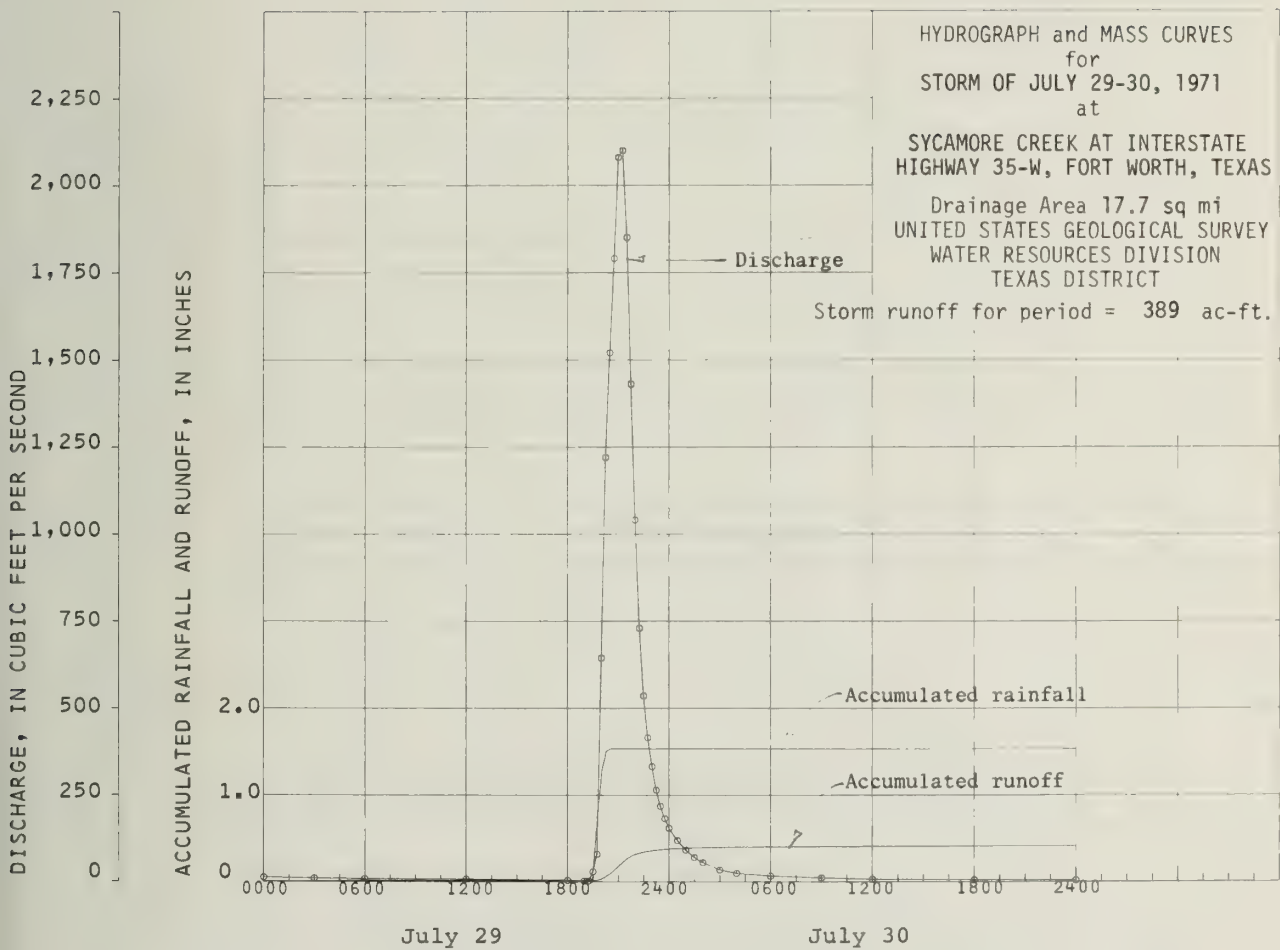
SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

F O R T S O U T H U R B A N H Y D R O L O G Y S T U D Y												
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES						PERIOD : 1971 WATER YEAR						
S A G E C O U N T Y												
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF		
APR												
1	0.02	0.04	0.01	0.00	0.01	0.02	0.02	0.02	0.02	0.01	0.02	0.01
8	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01
12	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.00
13	0.01	0.03	0.02	0.03	0.02	0.01	0.00	0.01	0.01	0.01	0.01	0.00
16	1.65	1.44	1.50	1.50	1.51	1.70	1.64	1.83	1.85	1.70	1.85	1.70
17	0.75	1.02	0.82	0.74	0.81	0.82	0.82	1.22	1.24	0.77	1.24	0.77
18	0.00	0.02	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.11	0.00	0.11	0.00
20	0.34	0.33	0.39	0.34	0.34	0.36	0.37	0.35	0.34	0.29	0.34	0.29
28	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.13	0.01	0.13	0.01
TOT	2.91	3.04	2.75	2.68	2.75	2.87	2.88	3.60	3.73	2.75	3.73	2.75
MAY												
5	0.05	0.04	0.02	0.03	0.02	0.23	0.12	0.10	0.22	0.27	0.22	0.27
6	0.49	0.47	0.35	0.45	0.41	0.35	0.37	0.28	0.41	0.41	0.41	0.41
8	0.05	0.05	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.02	0.03	0.02
18	0.23	0.20	0.08	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.05	0.05	0.02	0.02	0.03	0.05	0.01	0.02	0.07	0.03	0.07	0.03
20	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.31	0.60	0.90	0.77	1.15	0.77	0.56	0.85	0.93	0.39	0.93	0.39
29	1.95	1.90	1.38	2.15	1.71	1.40	1.28	1.89	2.08	1.36	2.08	1.36
TOT	3.15	3.32	2.80	3.49	3.38	2.82	2.35	3.16	3.74	2.48	3.74	2.48
JUN												
13	0.05	0.06	0.05	0.01	0.07	0.02	0.01	0.01	0.03	0.05	0.03	0.05
14	0.00	0.00	0.00	0.00	0.00	0.10	0.03	0.01	0.05	0.04	0.05	0.04
20	0.00	0.00	0.00	0.00	0.00	0.59	0.03	0.00	0.00	0.61	0.00	0.61
21	2.30	1.84	1.28	0.93	1.01	0.17	0.50	0.23	0.24	0.20	0.24	0.20
28	0.00	0.00	0.00	0.00	0.00	0.10	0.12	0.05	0.09	0.17	0.09	0.17
29	0.55	0.35	0.05	0.20	0.03	0.35	0.26	0.33	0.32	0.24	0.32	0.24
TOT	2.90	2.25	1.32	1.14	1.11	1.33	0.95	0.63	0.73	1.31	0.73	1.31
MTOT=MONTHLY TOTALS												
SC=SYCAMORE CREEK												
ST=SYCAMORE CREEK TRIBUTARY												
DB=DRY BRANCH												
LF=LITTLE FOSSIL CREEK												

F O R T N O R T H U K R A N H Y D R O L O G Y S T U D Y													
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES										PERIOD : 1971 WATER YEAR			
G A G E N U M B E R													
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF			
JUL													
2	0.07	0.13	0.00	0.28	0.14	0.02	0.07	0.14	0.15	0.00			
19	0.63	0.75	0.87	0.59	0.65	0.20	0.20	0.07	0.10	0.15			
21	0.12	0.09	0.07	0.04	0.03	0.22	0.15	0.19	0.19	0.22			
23	0.13	0.30	0.28	0.17	0.12	0.52	0.54	0.35	0.37	0.44			
24	0.32	0.20	0.15	0.35	0.13	0.00	0.11	0.00	0.00	0.00			
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.14	0.01			
27	0.14	0.15	0.12	0.14	0.11	0.10	0.14	0.22	0.35	0.11			
28	0.22	0.26	0.45	1.31	1.70	0.35	0.20	0.58	0.40	0.25			
29	1.64	1.55	1.30	1.32	1.95	0.62	0.80	0.42	0.21	0.33			
30	0.00	0.00	0.00	0.00	0.00	0.19	0.10	0.01	0.02	0.01			
MTOT	3.27	3.43	3.24	4.32	4.87	2.30	2.40	2.25	1.93	1.52			
AUG													
5	0.12	0.30	0.62	0.43	0.26	0.08	0.00	0.02	0.07	0.07			
6	0.00	0.00	0.00	0.00	0.00	0.62	0.05	0.03	1.57	1.20			
13	1.11	1.05	0.97	0.90	0.89	0.57	0.52	0.68	0.56	0.46			
14	0.26	0.47	0.20	1.75	0.75	1.50	1.01	0.38	0.75	1.40			
15	0.00	0.00	0.00	0.00	0.00	1.54	1.89	0.01	0.04	1.54			
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04			
24	0.00	0.00	0.89	0.48	0.64	0.05	0.19	0.20	0.06	0.10			
25	0.62	0.73	0.69	0.65	0.66	0.25	0.35	0.05	0.34	0.26			
26	0.88	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
MTOT	2.99	2.55	3.40	4.21	3.20	4.61	4.01	1.37	3.39	5.07			
MTOT=MONTHLY TOTALS													
SC=SYCAMORE CREEK													
ST=SYCAMORE CREEK TRIBUTARY													
DB=DRY BRANCH													
LF=LITTLE FOSSIL CREEK													

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y												
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES												
PERIOD : 1971 WATER YEAR												
G A G G E N U M B E R												
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF		
SEPT												
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00		
19	0.04	0.10	0.05	0.07	0.06	0.06	0.05	0.10	0.10	0.06		
22	0.65	0.80	0.70	0.91	0.86	0.73	0.73	0.75	0.70	0.62		
23	0.76	0.65	0.52	0.39	0.54	0.65	0.68	0.63	0.75	0.65		
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.05		
25	0.14	0.38	0.42	0.27	0.49	0.07	0.36	0.24	0.15	0.10		
4TOT	1.54	1.93	1.69	1.64	1.95	1.51	1.82	1.75	1.85	1.48		
WTOT	22.36	21.82	20.13	22.88	21.57	20.25	18.73	18.43	20.22	19.01		
MONTHLY TOTALS												
WATER YEAR TOTAL												
SC=SYCAMORE CREEK												
ST=SYCAMORE CREEK TRIBUTARY												
DB=DRY BRANCH												
LF=LITTLE FOSSIL CREEK												

TABLE SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF JULY 29-30, 1971									
STATION NO. 04044520									
STORM RAINFALL AND RUNOFF RECORD									
1971 WATER YEAR									
DATE & TIME	1-SC	2-SC	3-SC	GAGE	NUM	R	F	PRECIP. IN.	DISCHARGE CFS
JULY 29									
0000	0.0	0.0	0.0	0.0				0.0	12.0
0300	0.0	0.0	0.0	0.0				0.0	9.4
0600	0.0	0.0	0.0	0.0				0.01	7.6
1200	0.0	0.0	0.05	0.05				0.01	7.0
1800	0.0	0.0	0.05	0.05				0.01	3.8
1900	0.0	0.0	0.05	0.05				0.01	2.6
1915	0.0	0.0	0.05	0.05				0.01	2.6
1930	0.03	0.10	0.49	0.49				0.15	29.0
1945	0.70	0.78	0.95	0.95				0.79	79.0
2000	1.37	1.30	1.10	1.10				1.29	644.0
2015	1.50	1.52	1.24	1.24				1.50	1220.0
2030	1.64	1.55	1.30	1.30				1.53	1520.0
2045	1.64	1.55	1.30	1.30				1.53	1790.0
2100	1.64	1.55	1.30	1.30				1.53	2080.0
2115	1.64	1.55	1.30	1.30				1.53	2100.0
2130	1.64	1.55	1.30	1.30				1.53	1850.0
2145	1.64	1.55	1.30	1.30				1.53	1430.0
2200	1.64	1.55	1.30	1.30				1.53	1040.0
2215	1.64	1.55	1.30	1.30				1.53	729.0
2230	1.64	1.55	1.30	1.30				1.53	535.0
2245	1.64	1.55	1.30	1.30				1.53	415.0
2300	1.64	1.55	1.30	1.30				1.53	332.0
2315	1.64	1.55	1.30	1.30				1.53	264.0
2330	1.64	1.55	1.30	1.30				1.53	217.0
2345	1.64	1.55	1.30	1.30				1.53	182.0
2400	1.64	1.55	1.30	1.30				1.53	154.0
JULY 30									
0000	1.64	1.55	1.30	1.30				1.53	154.0
0030	1.64	1.55	1.30	1.30				1.53	118.0
0100	1.64	1.55	1.30	1.30				1.53	91.0
0130	1.64	1.55	1.30	1.30				1.53	70.0
0200	1.64	1.55	1.30	1.30				1.53	55.0
0300	1.64	1.55	1.30	1.30				1.53	34.0
0400	1.64	1.55	1.30	1.30				1.53	24.0
0600	1.64	1.55	1.30	1.30				1.53	16.0
0900	1.64	1.55	1.30	1.30				1.53	11.0
1200	1.64	1.55	1.30	1.30				1.53	7.0
1400	1.64	1.55	1.30	1.30				1.53	4.7
2400	1.64	1.55	1.30	1.30				1.53	3.4
ACCUM. WEIGHTED PRECIP. IN.									
0000	0.0							0.0	
0300	0.0							0.0	
0600	0.0							0.01	
1200	0.01							0.01	
1800	0.01							0.01	
1900	0.01							0.01	
1915	0.01							0.01	
1930	0.15							0.15	
1945	0.79							0.79	
2000	1.29							1.29	
2015	1.50							1.50	
2030	1.53							1.53	
2045	1.53							1.53	
2100	1.53							1.53	
2115	1.53							1.53	
2130	1.53							1.53	
2145	1.53							1.53	
2200	1.53							1.53	
2215	1.53							1.53	
2230	1.53							1.53	
2245	1.53							1.53	
2300	1.53							1.53	
2315	1.53							1.53	
2330	1.53							1.53	
2345	1.53							1.53	
2400	1.53							1.53	
ACCUM. DISCHARGE IN									
0000									0.0016
0300									0.0040
0600									0.0070
1200									0.0107
1800									0.0119
1900									0.0120
1915									0.0121
1930									0.0127
1945									0.0144
2000									0.0245
2015									0.0552
2030									0.0845
2045									0.1277
2100									0.1732
2115									0.2192
2130									0.2597
2145									0.2910
2200									0.3137
2215									0.3297
2230									0.3414
2245									0.3505
2300									0.3577
2315									0.3635
2330									0.3683
2345									0.3722
2400									0.3739
TOTAL									
									0.3773
									0.3825
									0.3865
									0.3895
									0.3931
									0.3961
									0.3993
									0.4028
									0.4056
									0.4084
									0.4109
									0.4118

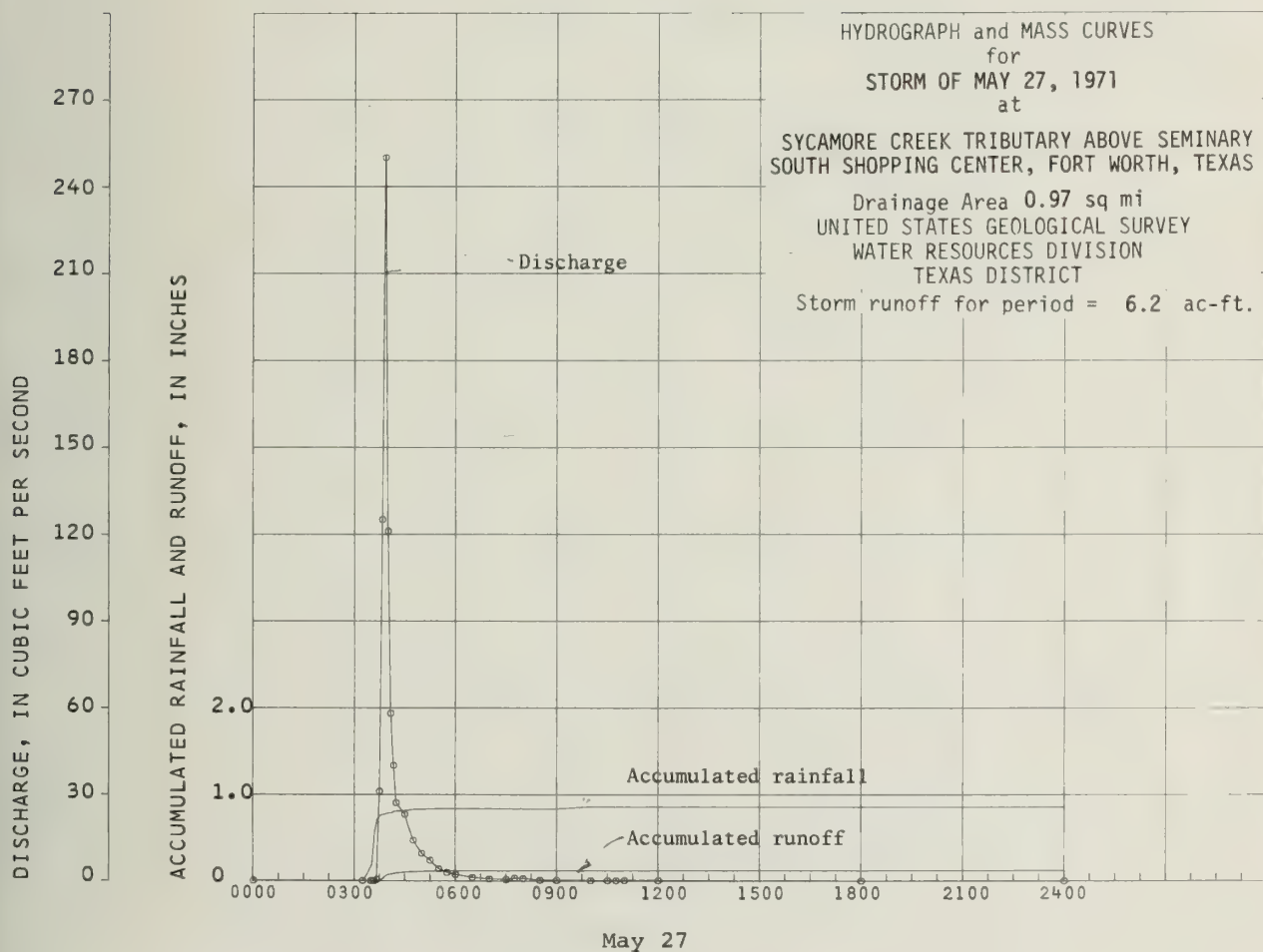


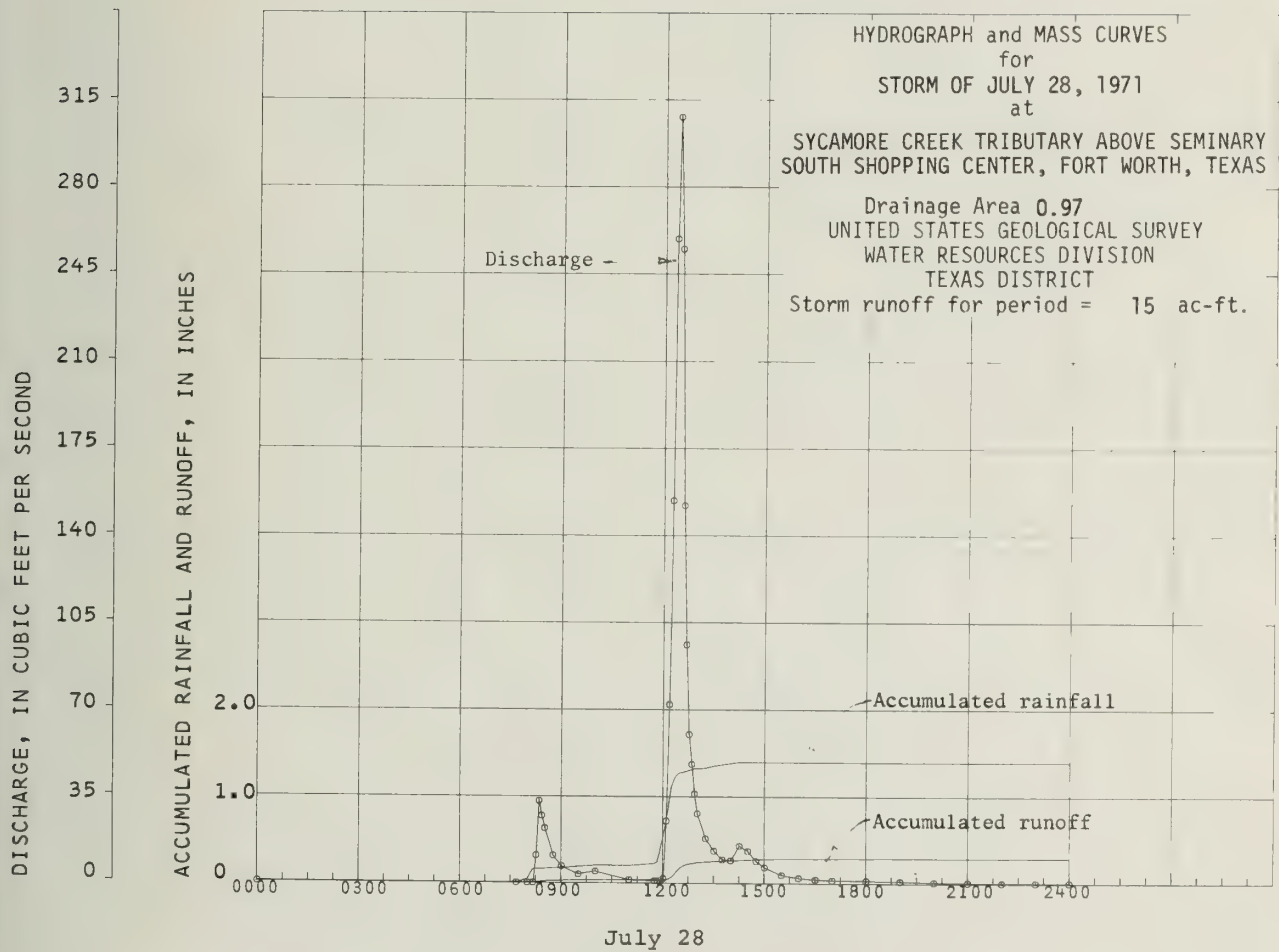
STATION NO. 08048530									
TABLE									
SYCAMORE CK TRIM ARV SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF MAY 27, 1971									
DATE & TIME									
1-ST 2-ST 3-ST 4-ST 5-ST 6-ST 7-ST 8-ST 9-ST 10-ST									
IN. CFS IN. CFS IN. CFS IN. CFS IN. CFS IN. CFS IN. CFS IN. CFS									
1971 WATER YEAR									
DISCHARGE ACCUM. FUGHTEN PFCIP. IN. IN. IN. IN. IN. IN. IN. IN. IN. IN.									
RUNOFF									
MAY 27									
0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001
0315	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001
0330	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0001
0335	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0001
0340	0.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0001
0345	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0043
0350	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0209
0355	0.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0542
0400	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0703
0405	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0780
0410	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0833
0415	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0905
0420	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0997
0425	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1053
0430	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1091
0435	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1119
0440	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1136
0445	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1148
0450	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1160
0455	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1169
0500	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1174
0505	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1177
0510	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1180
0515	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1185
0520	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1187
0525	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1190
0530	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1191
0535	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1193
0540	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1198
0545	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1200
0550	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1201

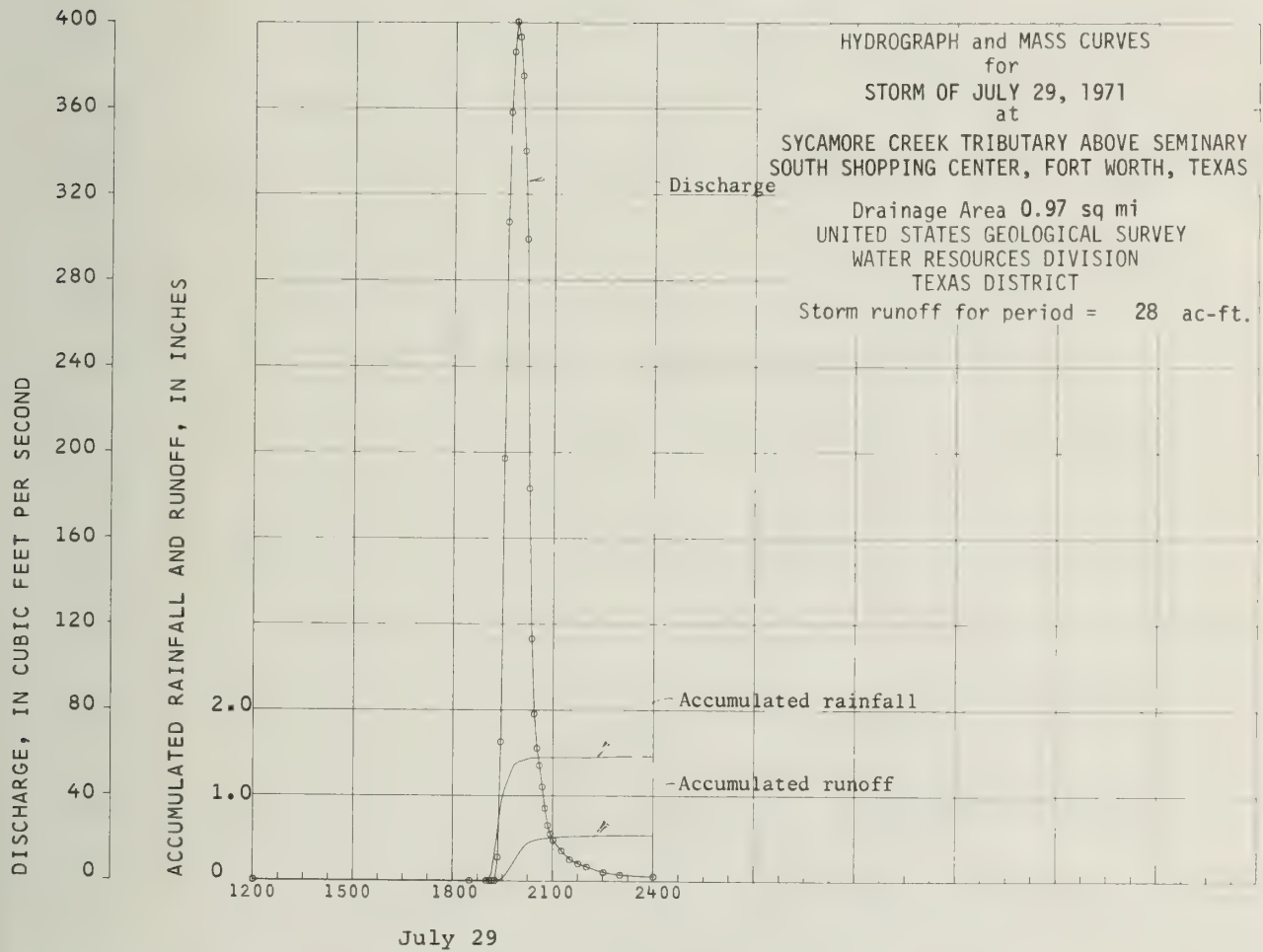
STATION NO. 0404R530									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CK TPIH ARV SEM. S. SHOP. CENTER. FT MONTHLY. STORM OF JULY 28, 1971									
DATE & TIME									
1-ST 2-ST 3-ST 4-ST 5-ST 6-ST 7-ST 8-ST 9-ST 10-ST									
1971 WATER YEAR									
ACCU. DISCHARGE IN. CFS IN. ACCUM. PRECIP. IN. CFS IN.									
JULY 28									
0000	0.0	0.0						0.0	0.0001
0740	0.0	0.0						0.0	0.0001
0800	0.05	0.0						0.0	0.0001
0810	0.17	0.10						0.0	0.0001
0815	0.17	0.14						11.0	0.0016
0817	0.17	0.14						33.0	0.0060
0825	0.17	0.14						27.0	0.0096
0830	0.17	0.14						22.0	0.0154
0845	0.14	0.14						11.0	0.0198
0900	0.14	0.14						6.7	0.0238
0930	0.20	0.15						3.4	0.0266
1000	0.21	0.14						4.7	0.0322
1100	0.21	0.14						1.3	0.0340
1145	0.24	0.14						0.8	0.0346
1150	0.24	0.26						0.8	0.0347
1155	0.34	0.24						0.8	0.0348
1200	0.54	0.41						1.8	0.0350
1205	0.64	0.65						25.0	0.0384
1210	0.90	0.86						72.0	0.0479
1215	1.12	1.07						154.0	0.0685
1220	1.15	1.34						259.0	0.1029
1225	1.14	1.51						308.0	0.1439
1230	1.20	1.54						255.0	0.1779
1235	1.20	1.55						152.0	0.1981
1240	1.21	1.56						96.0	0.2109
1245	1.22	1.57						60.0	0.2149
1250	1.23	1.54						48.0	0.2253
1255	1.24	1.61						36.0	0.2301
1300	1.24	1.62						28.0	0.2375
1315	1.24	1.64						18.0	0.2447
1330	1.27	1.64						13.0	0.2499
1345	1.29	1.65						9.5	0.2537
1400	1.30	1.64						9.2	0.2574
1415	1.31	1.70						15.0	0.2634
1430	1.31	1.70						13.0	0.2686
1445	1.31	1.70						9.0	0.2721
1500	1.31	1.70						6.5	0.2760
1530	1.31	1.70						3.4	0.2788
1600	1.31	1.70						2.2	0.2805

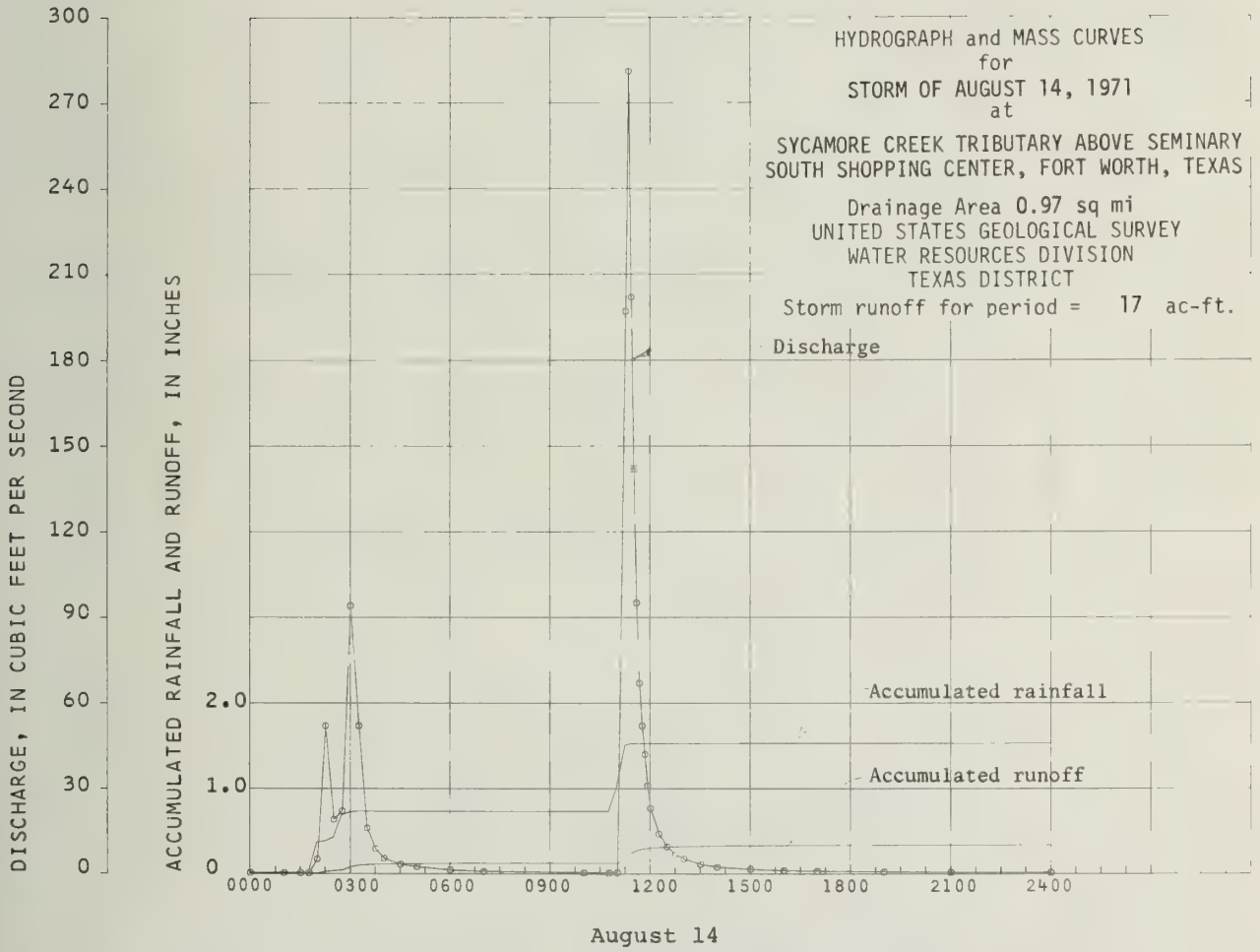
STATION NO. 04048530									
SYCAMORE CR TRIS DIV 5FM. S. SHOP. CENTER. FT WORTH, TEX.									
STORM OF JULY 29, 1971									
STORM RAINFALL AND RUNOFF RECORD									
TABLE									
DATE & TIME									
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STA. NO.	TABLE	STORM RAINFALL AND RUNOFF RECORD									
		1971 WATER YEAR					1972 WATER YEAR				
DATE & TIME	SYCAMORE CK TRIM DIV SEM. S. SHOP. CENTER. FT WORTH, TEX. STORM OF AUG. 14, 1971										
	1-ST	2-ST	3-ST	4-ST	5-ST	PRECIP.	IN.	CFS	IN.	ACCUM. WEIGHTED	
AUG. 14											
1900	1.75	0.75								1.53	
2100	1.75	0.75								1.53	
2400	1.75	0.75								1.53	
										0.7	
										0.5	
										0.4	
										0.3327	
										0.3348	
										0.3357	

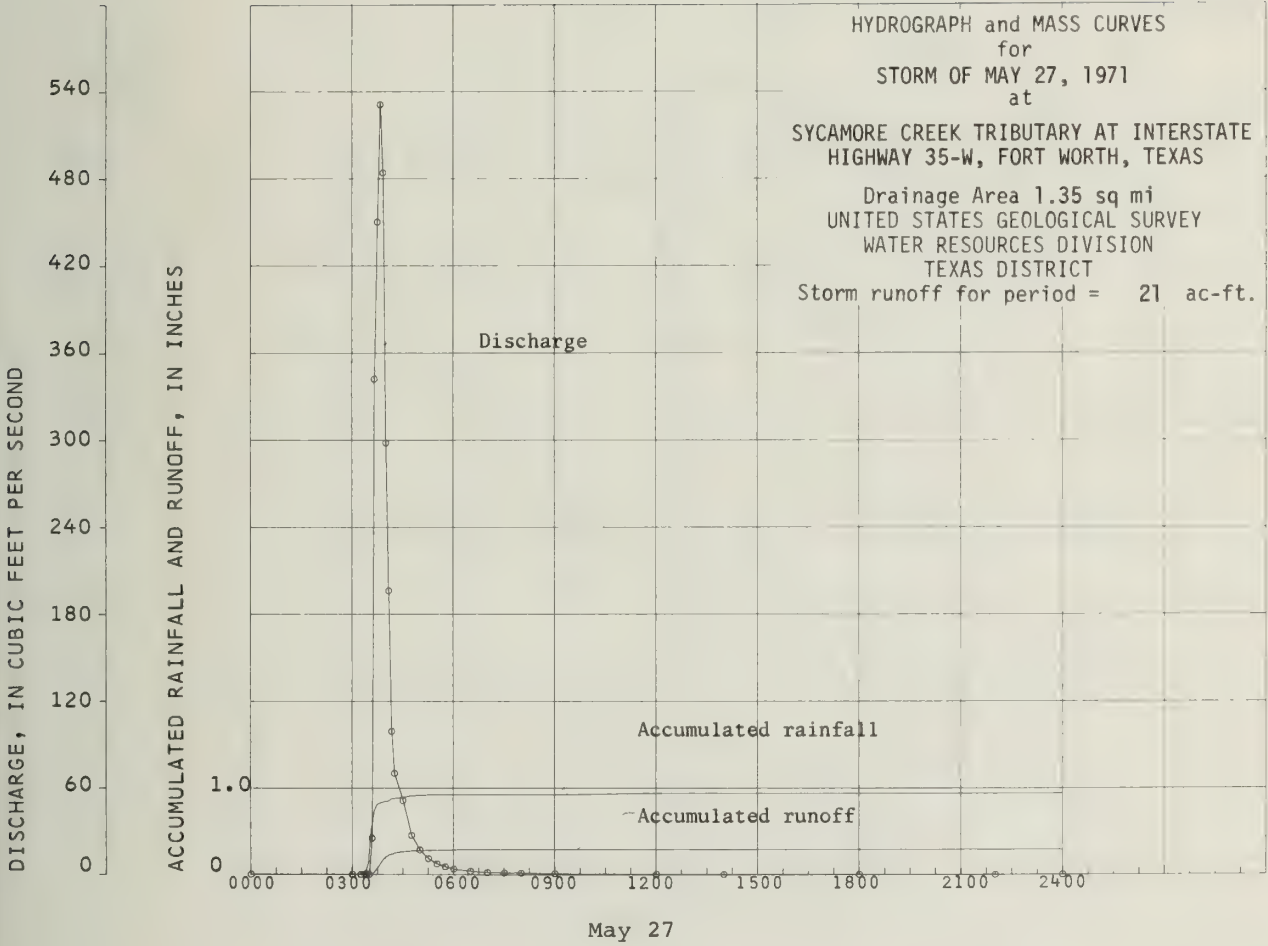


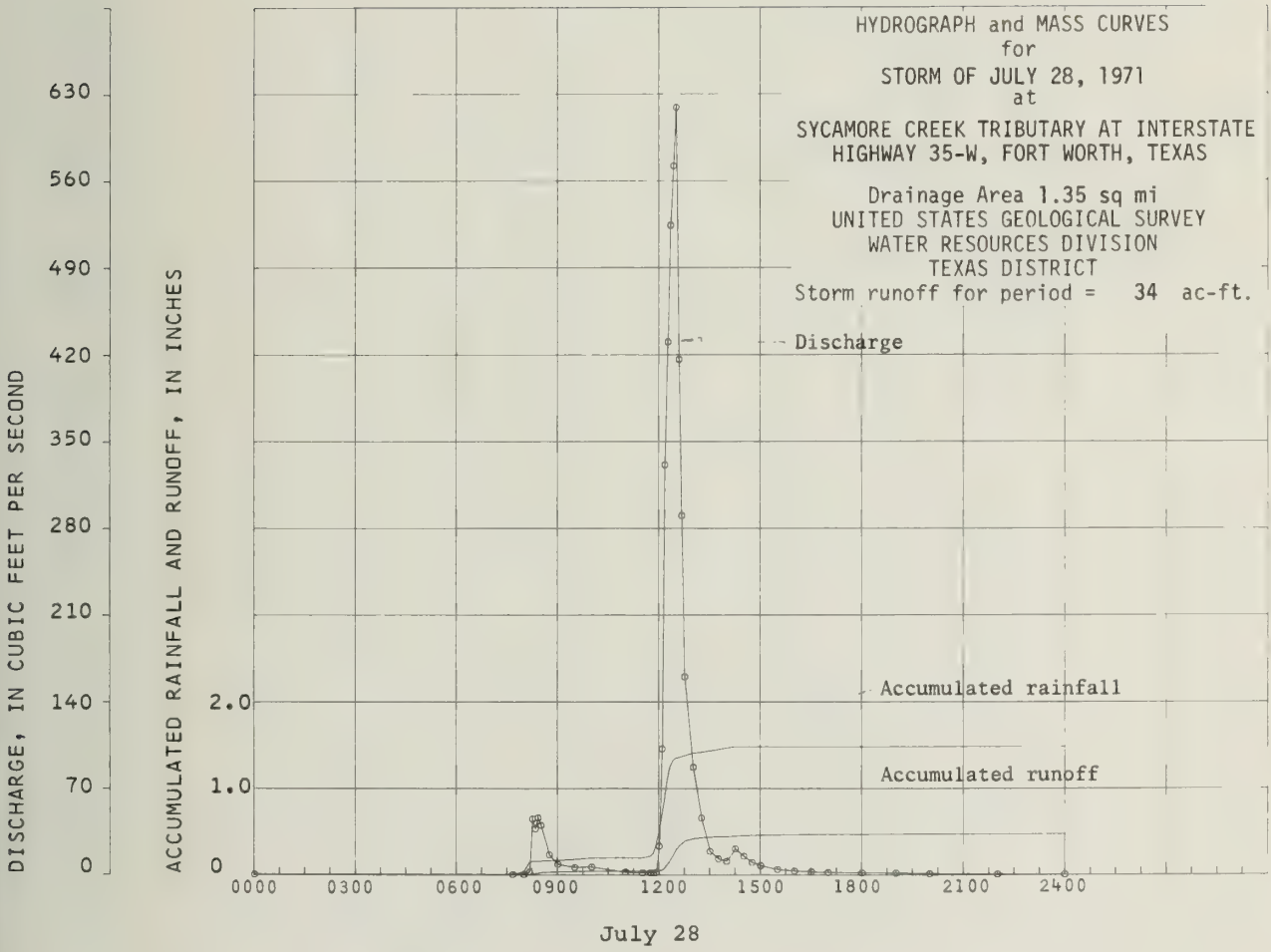


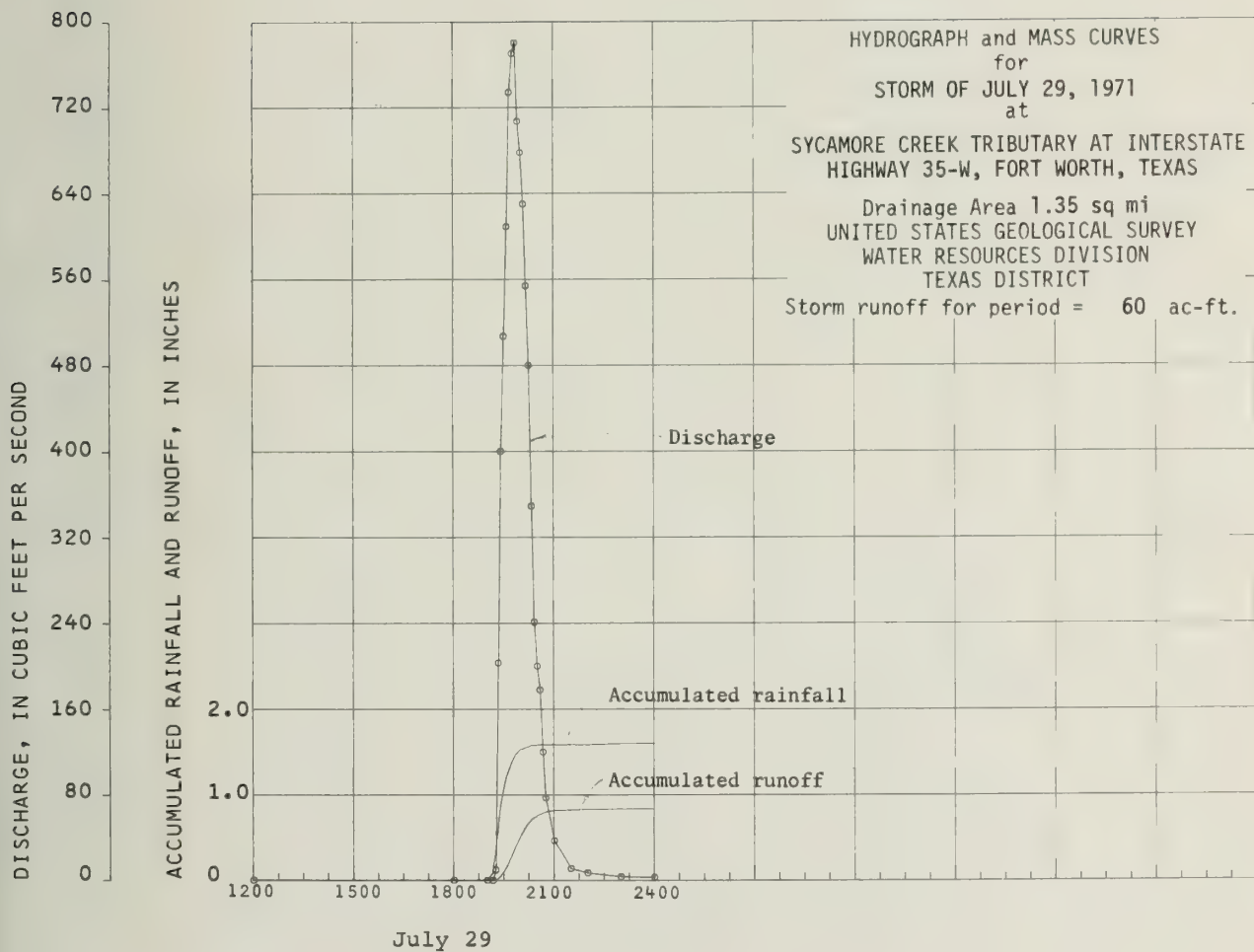


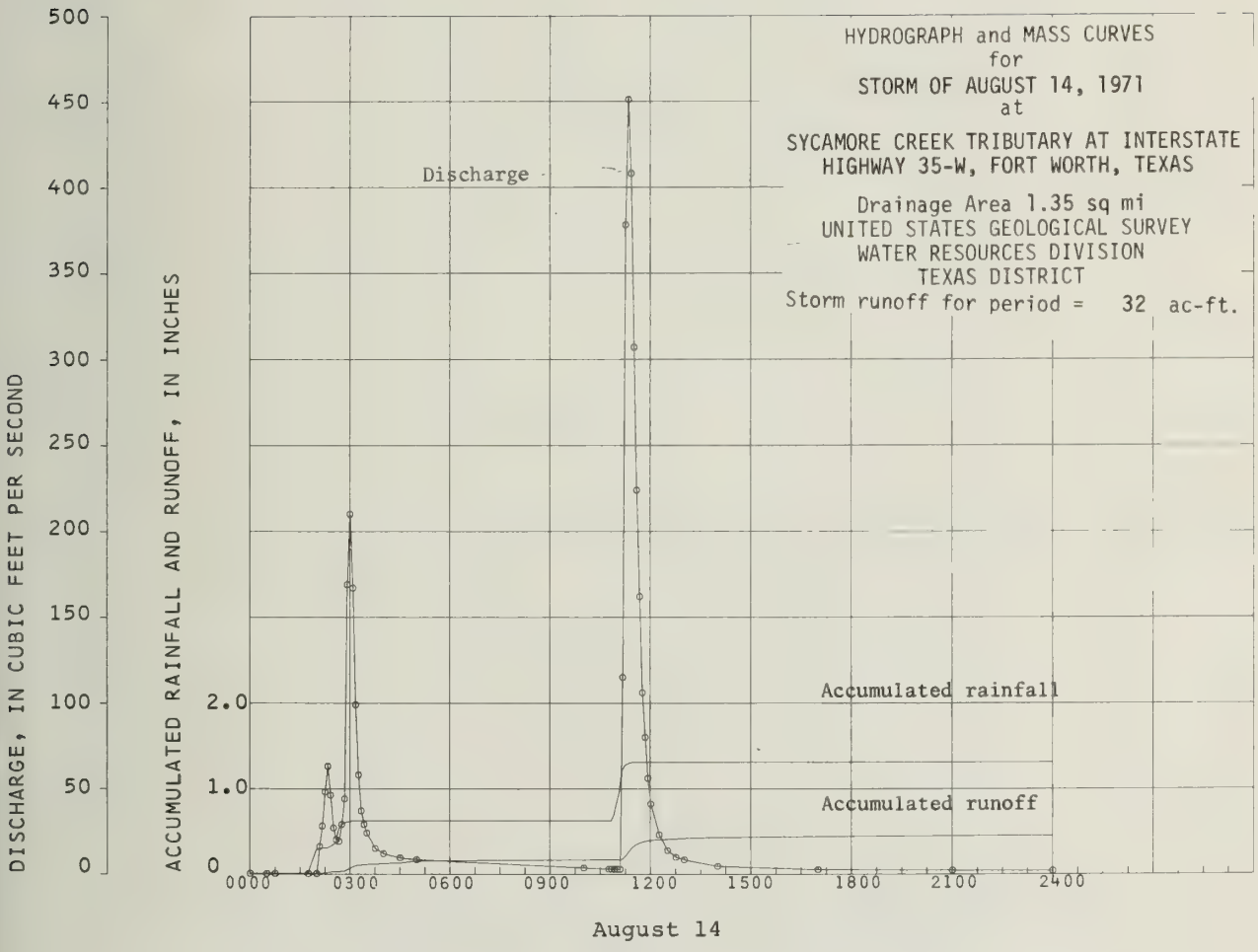


STATION NO. 08048540									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CK TRIP AT INTERSTATE HWY 35-W, FT WORTH, TEX. STORM OF JULY 29, 1971									
DATE & TIME	1-ST	2-ST	GAGE	N U M B E R	I N.	ACCUM. PRECIP. I N.	DISCHARGE I N.	CFS	1971 WATER YEAR ACCUM. RUNOFF I N.
JULY 29									
0000	0.0	0.0				0.0	0.2		0.0014
1200	0.0	0.0				0.0	0.1		0.0027
1800	0.0	0.0				0.0	0.1		0.0030
1900	0.0	0.0				0.0	0.1		0.0031
1910	0.09	0.04				0.09	0.1		0.0031
1915	0.27	0.35				0.31	9.8		0.0041
1920	0.44	0.80				0.60	203.0		0.0235
1925	0.75	1.04				0.88	400.0		0.0617
1930	0.94	1.20				1.05	507.0		0.1102
1935	1.01	1.47				1.21	609.0		0.1685
1940	1.04	1.58				1.30	734.0		0.2387
1945	1.18	1.65				1.39	770.0		0.3123
1950	1.25	1.72				1.46	780.0		0.3870
1955	1.26	1.80				1.50	707.0		0.4546
2000	1.27	1.85				1.53	678.0		0.5194
2005	1.27	1.88				1.54	630.0		0.5797
2010	1.28	1.90				1.55	554.0		0.6327
2015	1.29	1.91				1.56	480.0		0.6786
2020	1.30	1.93				1.58	349.0		0.7120
2025	1.30	1.93				1.58	241.0		0.7350
2030	1.30	1.94				1.58	200.0		0.7542
2035	1.30	1.95				1.59	178.0		0.7712
2040	1.30	1.95				1.59	120.0		0.7827
2045	1.30	1.95				1.59	77.0		0.7974
2100	1.30	1.95				1.59	37.0		0.8133
2130	1.30	1.95				1.59	11.0		0.8196
2200	1.30	1.95				1.59	7.0		0.8257
2300	1.32	1.95				1.60	3.4		0.8296
2400	1.32	1.95				1.60	2.7		0.8311





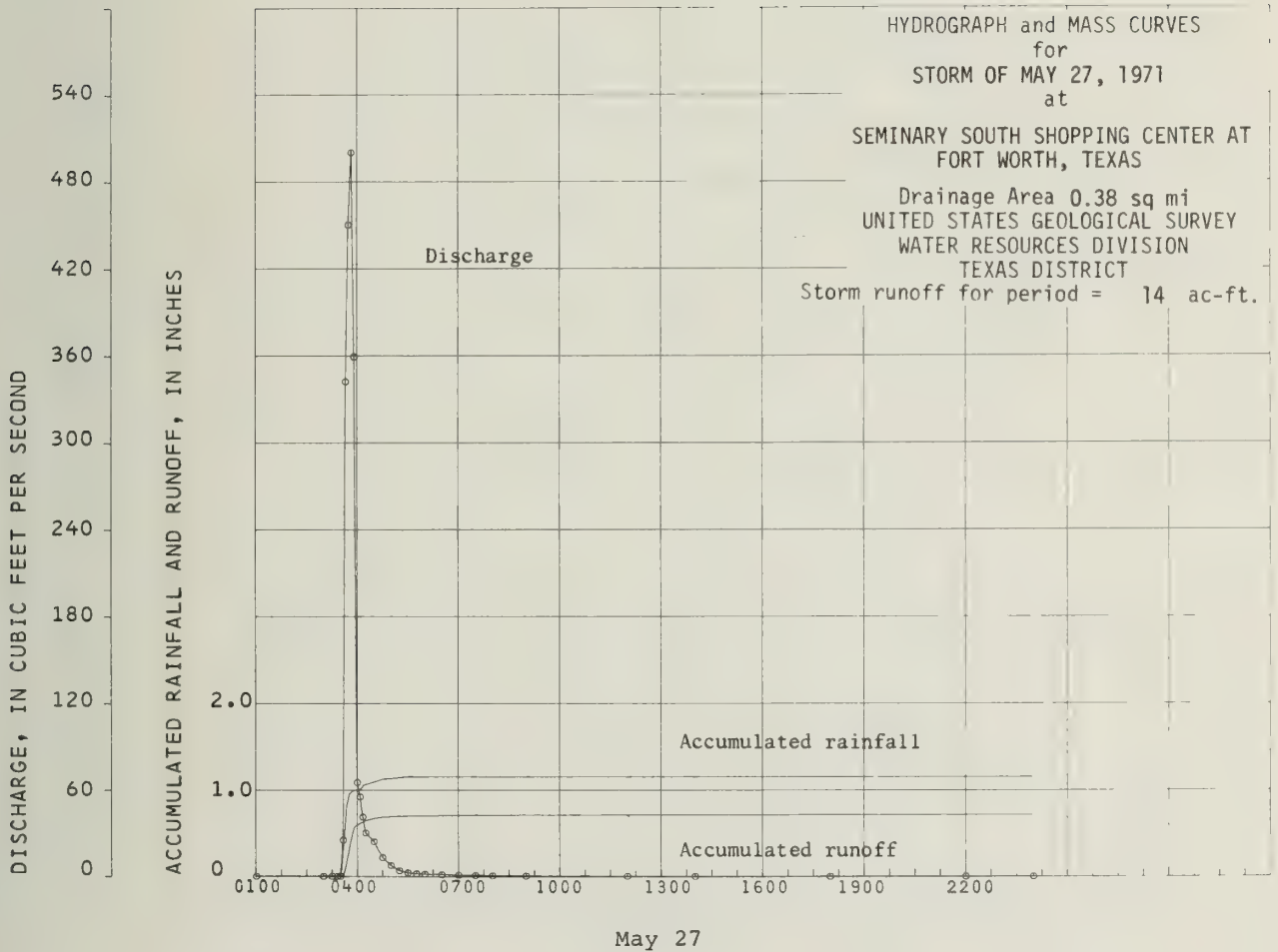


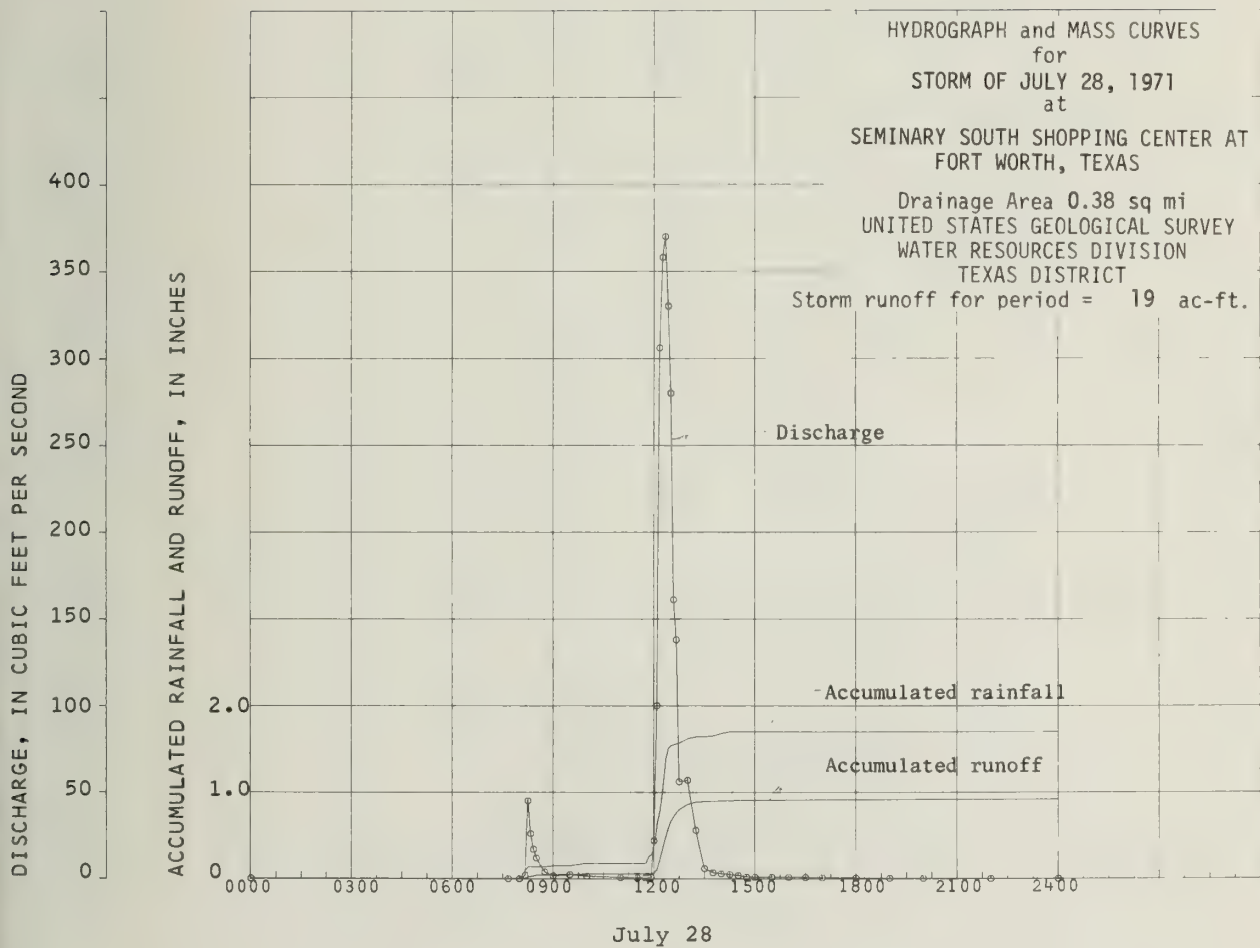


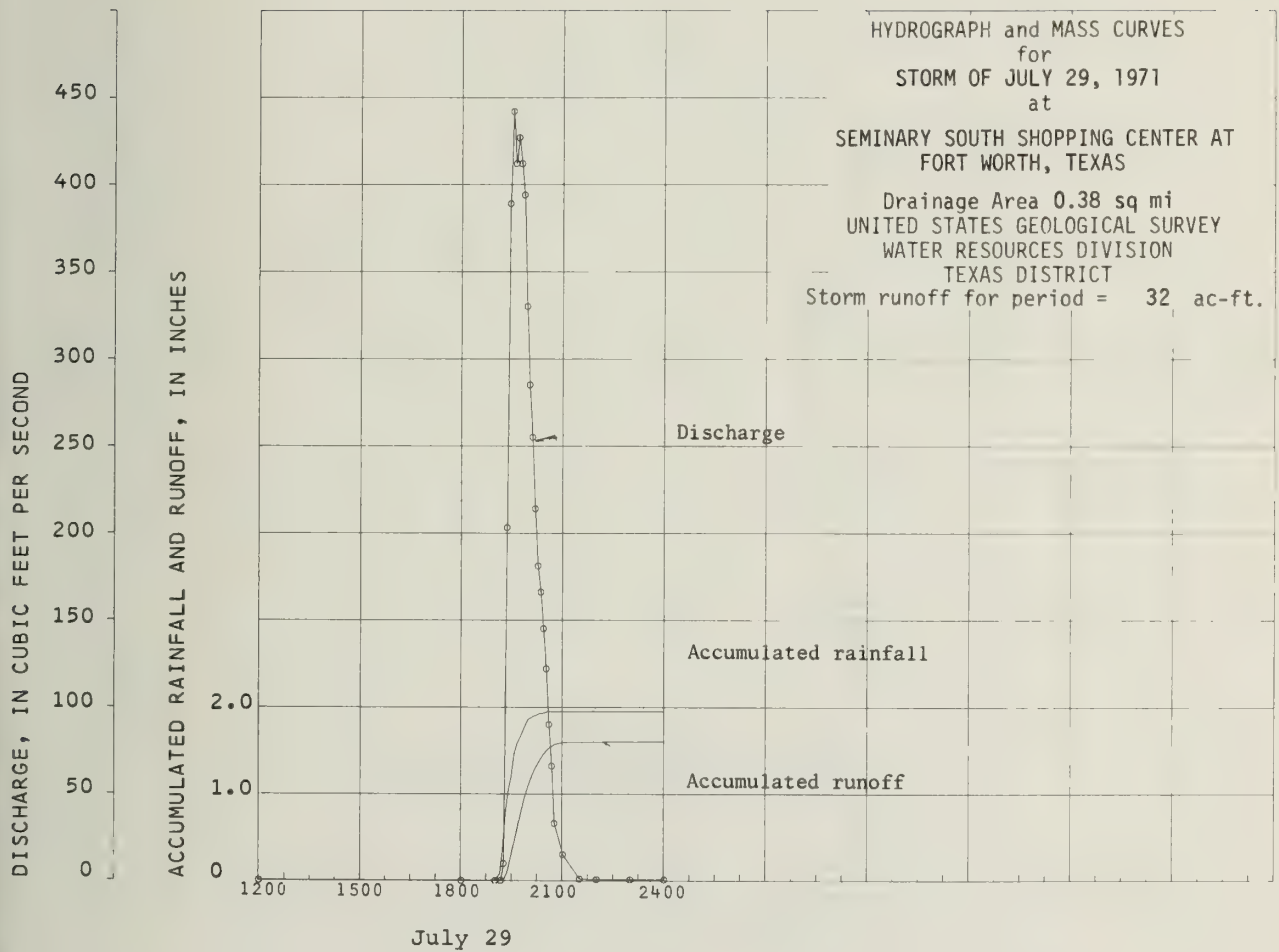
STA. NO.	DATE & TIME	2-ST	TABLE ----- STORM RAINFALL AND RUNOFF RECORD										1971 WATER YEAR	
			EST. OF RUNOFF FROM SEM. S. SHOP. CENTER. FT. WORTH. TEX. STORM OF MAY 27, 1971										DISCHARGE	ACCUM.
			G A G E N U M B E R										IN	RUNOFF
			I N.										CFS	IN.
MAY 27														
0000		0.0										0.0	0.0	0.0001
0300		0.0										0.0	0.0	0.0001
0315		0.0										0.0	0.0	0.0001
0325		0.0										0.0	0.0	0.0001
0330		0.05										0.0	0.0	0.0001
0335		0.43										0.43	25.0	0.0086
0340		0.81										0.81	342.0	0.1249
0345		0.95										0.95	450.0	0.2778
0350		0.98										0.98	500.0	0.4477
0355		0.99										0.99	359.0	0.5697
0400		1.00										1.00	65.0	0.5918
0405		1.00										1.00	55.0	0.6105
0410		1.05										1.05	41.0	0.6244
0415		1.06										1.06	30.0	0.6448
0430		1.09										1.09	24.0	0.6693
0445		1.12										1.12	13.0	0.6825
0500		1.13										1.13	7.5	0.6902
0515		1.14										1.14	3.9	0.6941
0530		1.15										1.15	2.4	0.6966
0545		1.15										1.15	1.8	0.6984
0600		1.15										1.15	1.5	0.7007
0630		1.15										1.15	1.1	0.7029
0700		1.15										1.15	0.8	0.7045
0730		1.15										1.15	0.6	0.7057
0800		1.15										1.15	0.4	0.7069
0900		1.15										1.15	0.3	0.7090
1200		1.15										1.15	0.1	0.7101
1400		1.15										1.15	0.1	0.7108
1800		1.15										1.15	0.0	0.7115
2200		1.15										1.15	0.0	0.7117
2400		1.15										1.15	0.0	0.7118

STATION NO. 1971 WATER YEAR									
EST. OF RUNOFF FROM S.E.M. S. SHOP. CENTER, FT WORTH, TEX. STORM OF JULY 28, 1971									
DATE & TIME									
PRECIP. IN. CFS IN. ACCUM. WEIGHTED PRECIP. IN. DISCHARGE IN. ACCUM. RUNOFF									
JULY 28									
0000	0.0							0.1	0.0009
0040	0.0							0.0	0.0018
0080	0.0							0.0	0.0018
0120	0.10							2.0	0.0028
0160	0.14							45.0	0.0141
0200	0.14							26.0	0.0270
0240	0.14							17.0	0.0327
0280	0.14							12.0	0.0409
0320	0.14							4.0	0.0450
0360	0.15							1.8	0.0477
0400	0.15							2.4	0.0526
0440	0.18							1.5	0.0572
0480	0.18							0.7	0.0593
0520	0.18							0.5	0.0601
0560	0.18							0.5	0.0604
0600	0.26							0.5	0.0606
0640	0.28							0.9	0.0610
0680	0.41							22.0	0.0684
0720	0.65							100.0	0.1024
0760	0.80							306.0	0.2064
0800	1.07							358.0	0.3281
0840	1.34							370.0	0.4538
0880	1.51							330.0	0.5659
0920	1.54							240.0	0.6611
0960	1.55							161.0	0.7158
1000	1.56							138.0	0.7627
1040	1.57							56.0	0.8007
1080	1.62							57.0	0.8589
1120	1.64							24.0	0.8874
1160	1.64							6.0	0.8935
1200	1.65							3.5	0.8971
1240	1.68							2.9	0.9000
1280	1.70							2.5	0.9026
1320	1.70							2.0	0.9046
1360	1.70							1.0	0.9056
1400	1.70							0.9	0.9071
1440	1.70							0.9	0.9090
1480	1.70							0.8	0.9107
1520	1.70							0.7	0.9121

STA. NO.	TABLE										1971 WATER YEAR	
	STORM RAINFALL AND RUNOFF RECORD											
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF JULY 29, 1971												
DATE	TIME	2-5T	5-8T	8-11T	11-2P	2-5P	5-8P	8-11P	11-2A	DISCHARGE IN	ACCUM. PRECIP. IN.	
JULY 29												
0000		0.0								0.0	0.0010	
1200		0.0								0.0	0.0024	
1800		0.0								0.0	0.0030	
1900		0.0								0.0	0.0031	
1910		0.04								0.08	0.0031	
1915		0.35								0.35	0.0065	
1920		0.80								203.0	0.0754	
1925		1.04								389.0	0.2076	
1930		1.20								442.0	0.3578	
1935		1.47								412.0	0.4978	
1940		1.58								427.0	0.6429	
1945		1.65								412.0	0.7830	
1950		1.72								394.0	0.9168	
1955		1.80								330.0	1.0290	
2000		1.86								285.0	1.1258	
2005		1.88								255.0	1.2125	
2010		1.90								214.0	1.2852	
2015		1.91								181.0	1.3467	
2020		1.93								166.0	1.4031	
2025		1.93								145.0	1.4524	
2030		1.94								122.0	1.4939	
2035		1.95								90.0	1.5244	
2040		1.95								66.0	1.5469	
2045		1.95								33.0	1.5693	
2100		1.95								15.0	1.5922	
2130		1.95								1.0	1.5943	
2200		1.95								0.7	1.5964	
2300		1.95								0.6	1.5989	
2400		1.95								0.6	1.6001	

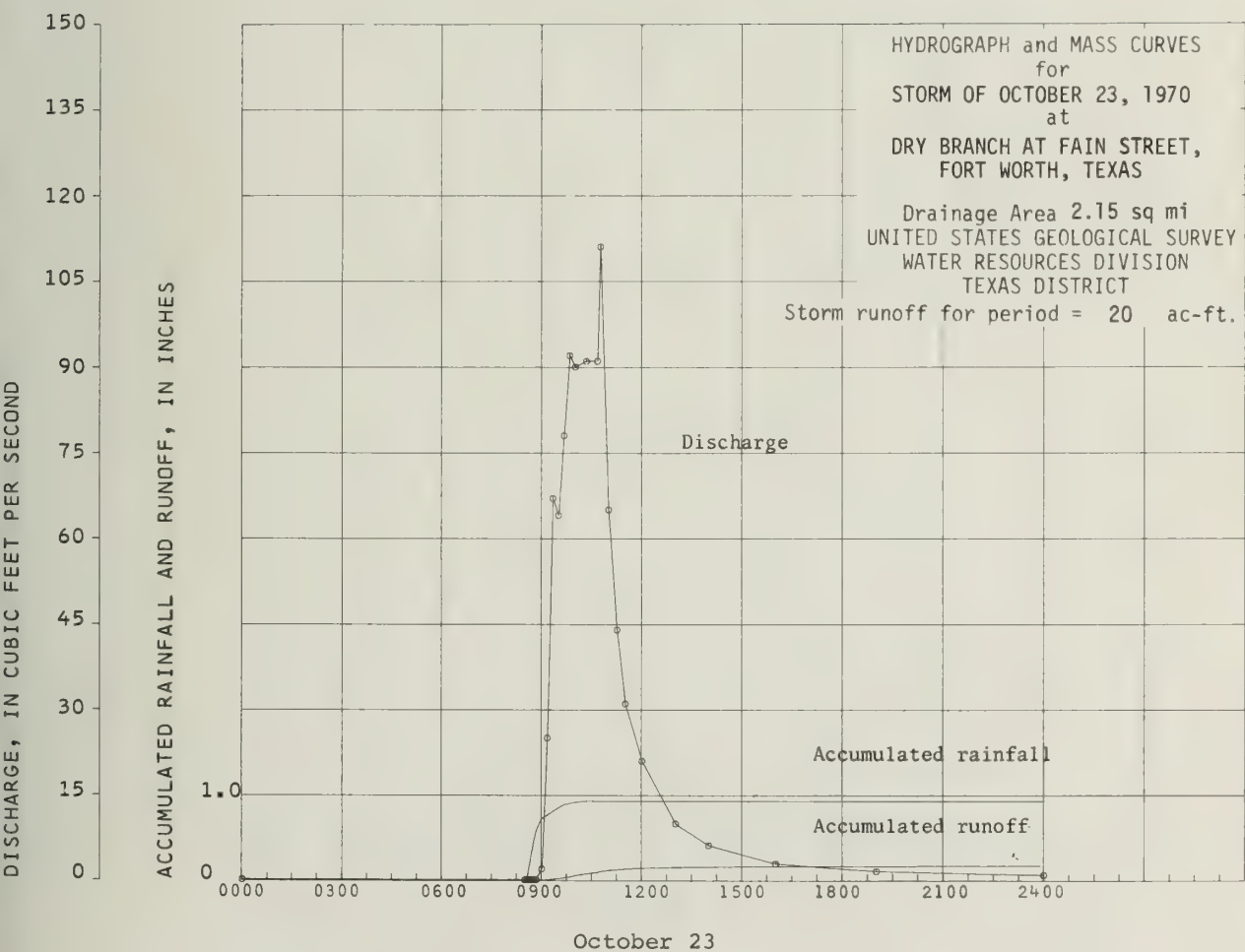


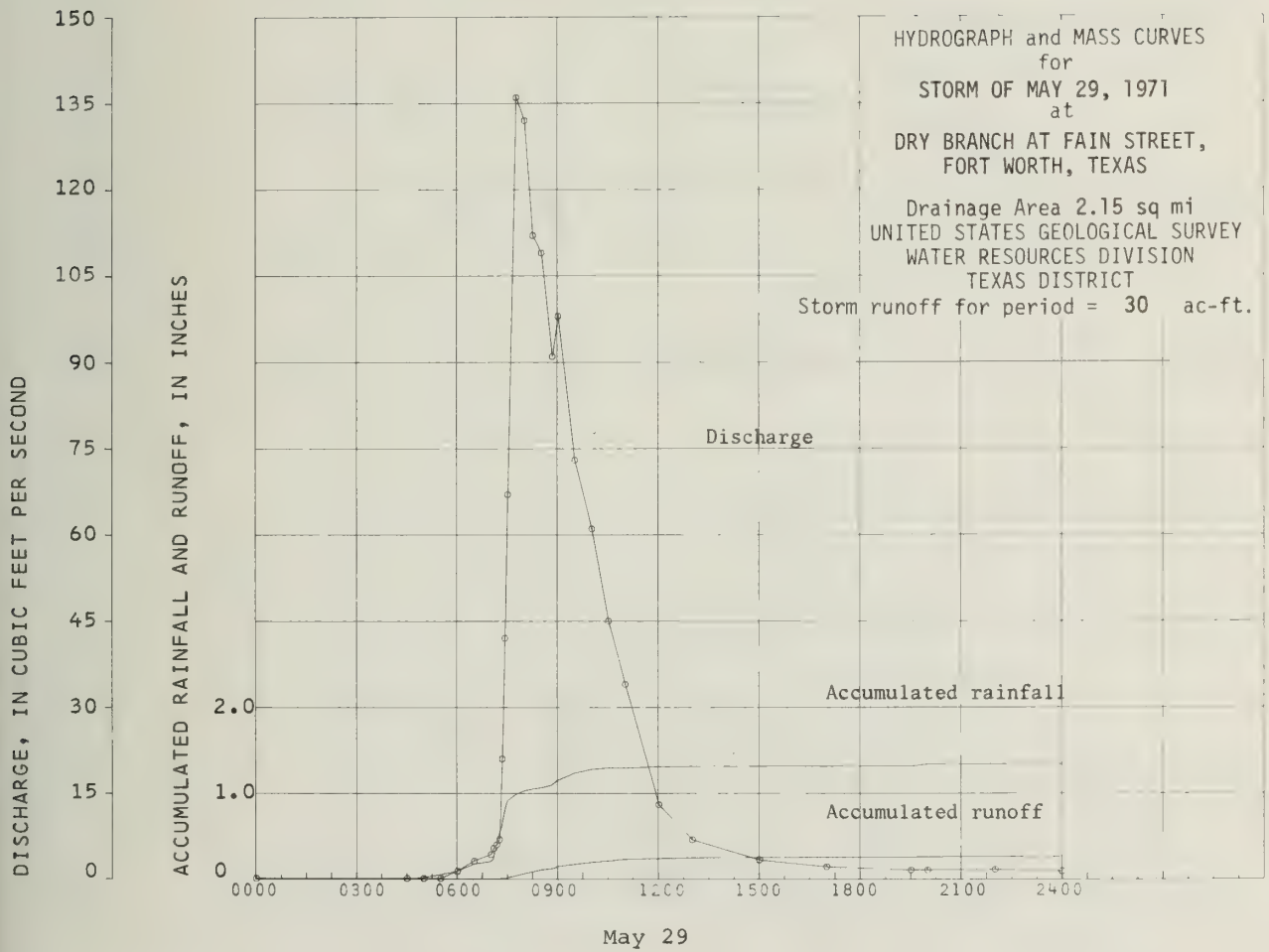




STA. NO.	TABLE										1971 WATER YEAR		
	----- STORM RAINFALL AND RUNOFF RECORD												
	DRY BRANCH AT FAIR STREET, FORT WORTH, TEX.												
DATE & TIME		1-DRY		2-DRY		STORM OF OCT. 23, 1970		ACCUM. WEIGHTED PRECIP.		DISCHARGE IN		ACCUM. RUNOFF IN.	
OCT. 23													
0000		0.0		0.0				0.0		0.1		0.0002	
0430		0.0		0.0				0.0		0.1		0.0005	
0835		0.0		0.0				0.03		0.1		0.0005	
0840		0.0		0.0				0.23		0.1		0.0005	
0845		0.0		0.07				0.40		0.1		0.0005	
0850		0.0		0.27				0.56		0.1		0.0005	
0900		0.0		0.20				0.72		2.0		0.0004	
0910		0.0		0.54				0.76		25.0		0.0038	
0920		1.0		0.60				0.80		67.0		0.0118	
0930		1.0		0.64				0.84		64.0		0.0195	
0940		1.0		0.69				0.88		78.0		0.0289	
0950		1.0		0.70				0.90		92.0		0.0399	
1000		1.1		0.72				0.91		90.0		0.0561	
1020		1.1		0.74				0.93		91.0		0.0780	
1040		1.1		0.74				0.93		91.0		0.0917	
1045		1.1		0.74				0.93		111.0		0.1050	
1100		1.1		0.74				0.93		65.0		0.1167	
1115		1.1		0.74				0.93		44.0		0.1246	
1130		1.1		0.74				0.93		31.0		0.1330	
1200		1.1		0.74				0.93		21.0		0.1444	
1300		1.1		0.74				0.93		10.0		0.1516	
1400		1.1		0.74				0.93		6.2		0.1583	
1600		1.1		0.74				0.93		3.0		0.1637	
1900		1.1		0.74				0.93		1.7		0.1686	
2400		1.1		0.74				0.93		1.0		0.1704	

STATION NO. 08048600									
TABLE									
DAY BRANCH AT FAIR STREET, FORT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
1971 WATER YEAR									
AUG. 15-16, 1971									
DATE & TIME	1-00	2-00	3-00	4-00	5-00	6-00	7-00	8-00	9-00
AUG. 15									
0900	0.0	0.0						0.0	0.0061
1200	0.0	0.0						0.0	0.0082
1600	0.0	0.0						0.0	0.0089
1630	0.0	0.0						0.0	0.0090
1645	0.0	0.0						0.01	0.0090
1700	0.13	0.0						0.04	0.0091
1715	0.62	0.67						0.34	0.0092
1725	1.12	0.65						0.86	0.0135
1730	1.24	0.66						0.95	0.0307
1745	1.52	1.37						1.44	0.0730
1800	1.53	1.63						1.58	0.1206
1815	1.54	1.45						1.69	0.1606
1830	1.54	1.89						1.71	0.2173
1900	1.54	1.69						1.71	0.2700
1915	1.54	1.29						1.71	0.3048
1930	1.54	1.54						1.71	0.3478
2000	1.54	1.89						1.71	0.3813
2030	1.54	1.89						1.71	0.3946
2100	1.54	1.89						1.71	0.4076
2200	1.54	1.89						1.71	0.4184
2300	1.54	1.89						1.71	0.4263
2400	1.54	1.89						1.71	0.4284
AUG. 16									
0000	1.54	1.53						1.71	0.4344
0300	1.54	1.89						1.71	0.4385
0600	1.54	1.89						1.71	0.4441
1500	1.54	1.89						1.71	0.4456
2400	1.54	1.89						1.71	0.4460





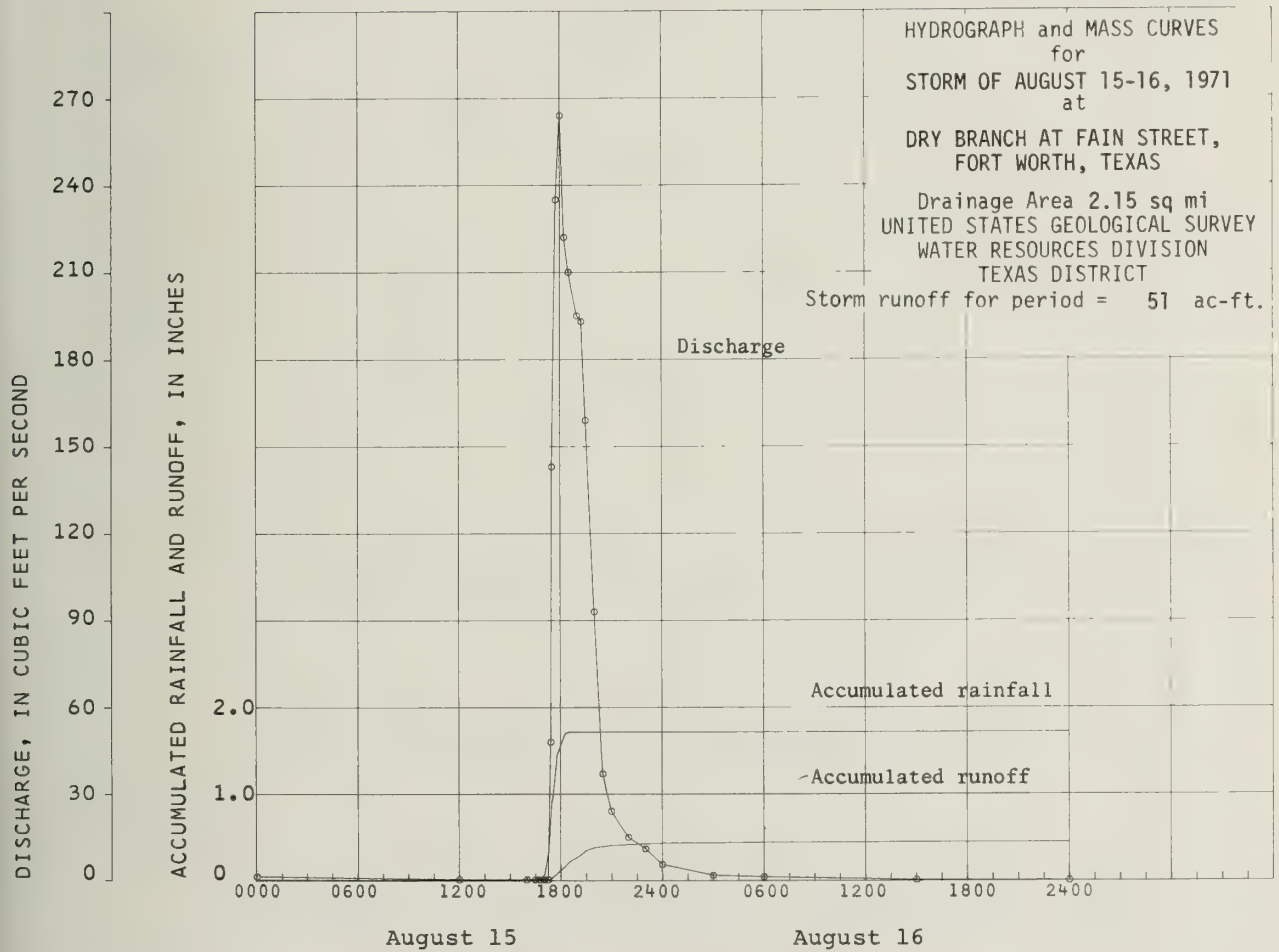
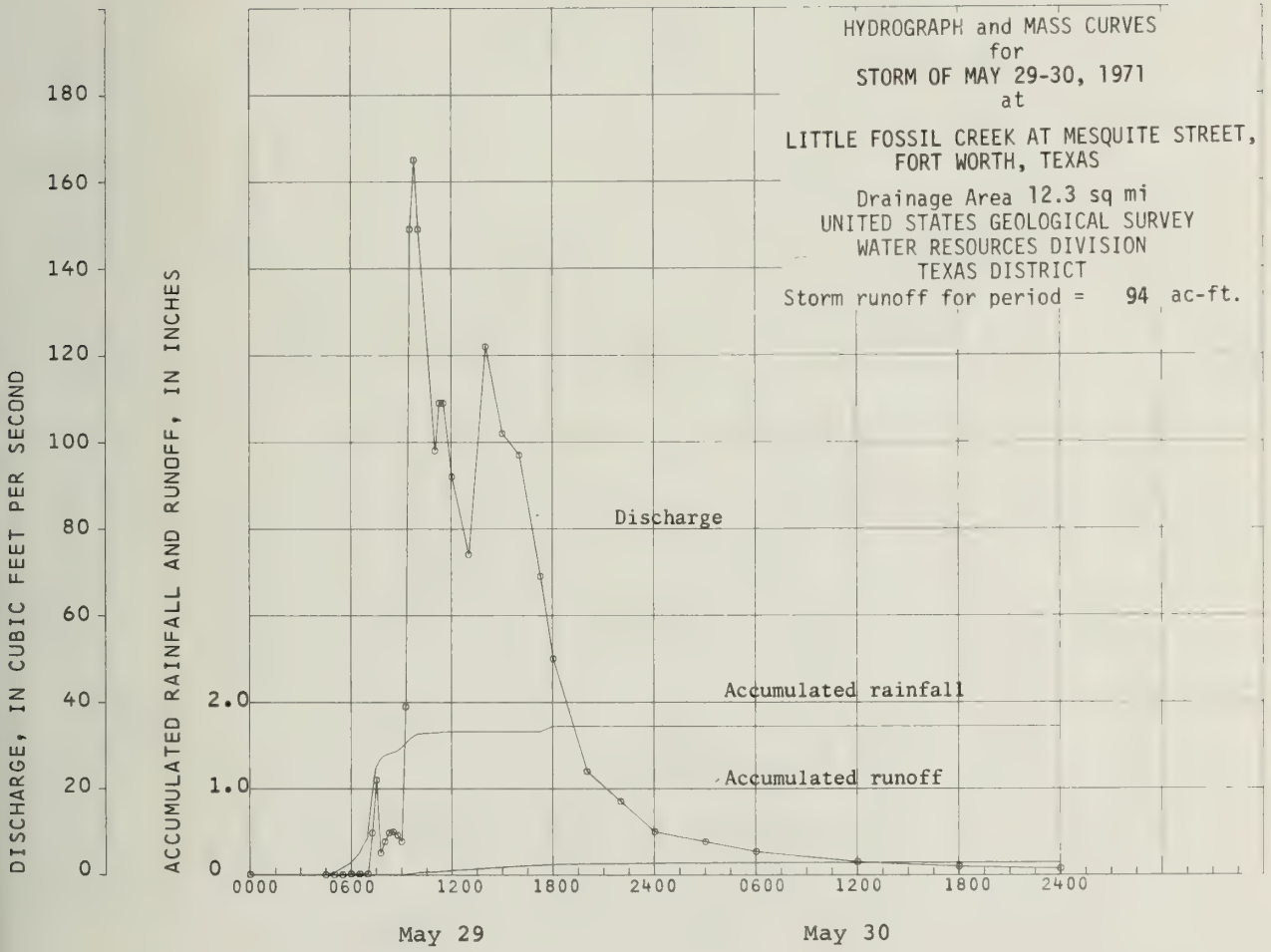
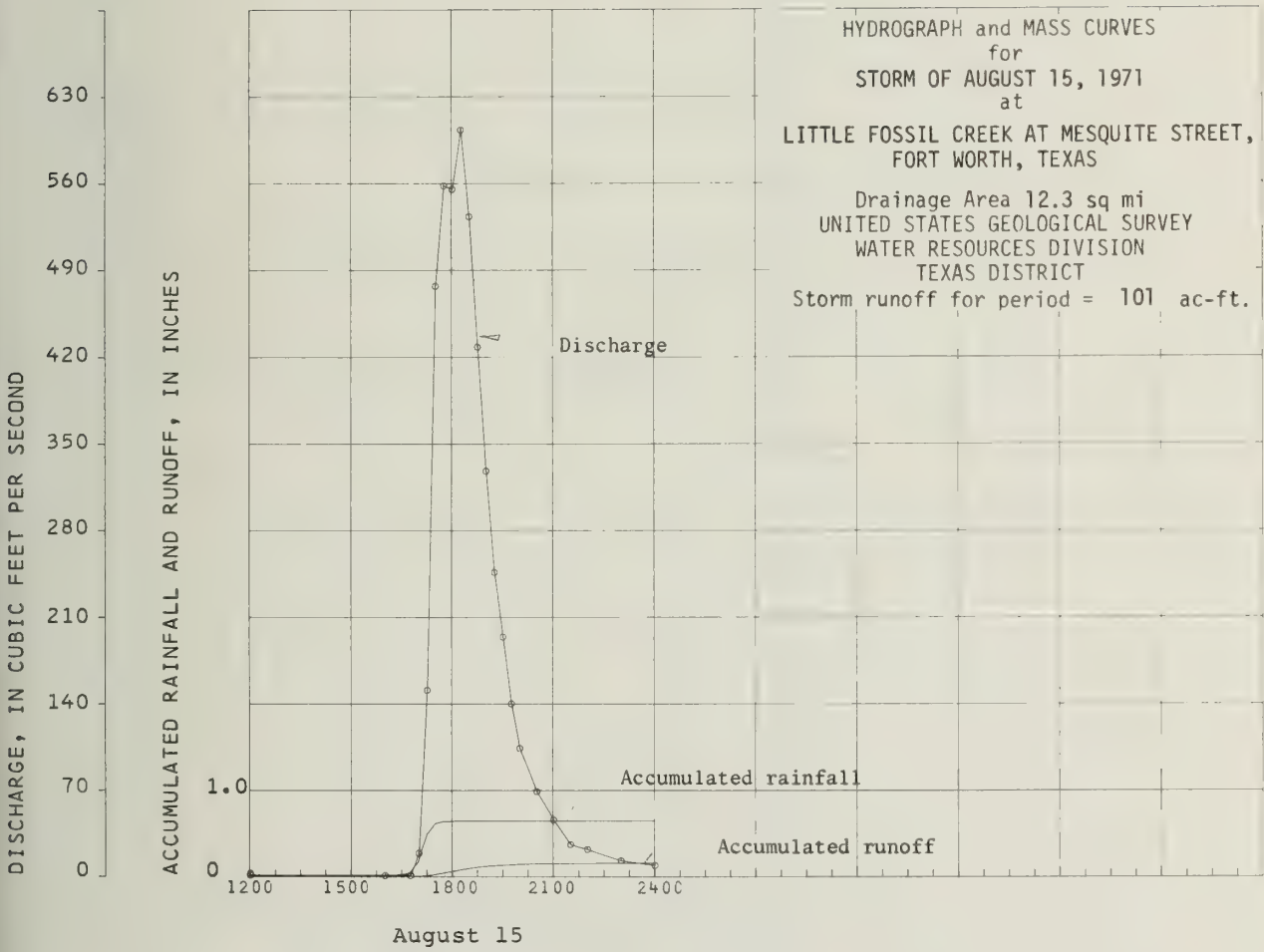


TABLE ----- STORM RAINFALL AND RUNOFF RECORD									
STA. NO.	LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF MAY 29-30, 1971								1971 WATER YEAR
DATE & TIME	1-LF	2-LF	3-LF	G A F	N U M B E R	ACCUM. PREFICP.	DISCHARGE IN	ACCUM. RUNOFF	
MAY 29									
0000	0.0	0.0	0.0			0.0	0.1	0.0000	
0430	0.0	0.0	0.0			0.0	0.0	0.0000	
0500	0.04	0.02	0.02			0.03	0.0	0.0000	
0530	0.11	0.07	0.07			0.08	0.0	0.0000	
0600	0.17	0.14	0.12			0.14	0.3	0.0001	
0630	0.31	0.26	0.21			0.24	0.3	0.0001	
0700	0.62	0.40	0.30			0.43	0.3	0.0001	
0715	0.93	1.01	0.74			0.89	9.7	0.0004	
0730	1.37	1.55	0.95			1.24	22.0	0.0011	
0745	1.45	1.64	1.06			1.34	5.1	0.0012	
0800	1.49	1.70	1.10			1.38	7.7	0.0015	
0815	1.51	1.72	1.12			1.40	9.7	0.0018	
0830	1.52	1.74	1.14			1.42	10.0	0.0021	
0845	1.54	1.76	1.15			1.44	9.2	0.0024	
0900	1.57	1.79	1.20			1.47	7.7	0.0026	
0915	1.62	1.84	1.24			1.52	39.0	0.0039	
0930	1.69	1.90	1.28			1.57	149.0	0.0086	
0945	1.72	1.94	1.31			1.61	165.0	0.0138	
1000	1.76	1.98	1.32			1.63	149.0	0.0255	
1100	1.78	2.00	1.33			1.65	98.0	0.0332	
1115	1.79	2.00	1.33			1.65	109.0	0.0366	
1130	1.80	2.00	1.34			1.66	109.0	0.0418	
1200	1.80	2.00	1.34			1.66	92.0	0.0505	
1300	1.80	2.00	1.34			1.66	74.0	0.0598	
1400	1.80	2.00	1.34			1.66	122.0	0.0752	
1500	1.80	2.00	1.34			1.66	102.0	0.0880	
1600	1.80	2.00	1.34			1.66	97.0	0.1018	
1715	1.80	2.00	1.34			1.66	69.0	0.1105	
1800	1.89	2.04	1.36			1.72	50.0	0.1191	
2000	1.89	2.04	1.36			1.72	24.0	0.1252	
2200	1.89	2.04	1.36			1.72	17.0	0.1295	
2400	1.89	2.04	1.36			1.72	10.0	0.1307	
MAY 30									
0000	1.89	2.04	1.36			1.72	10.0	0.1326	
0300	1.89	2.04	1.36			1.72	7.7	0.1355	
0600	1.89	2.08	1.36			1.72	5.4	0.1386	
1200	1.89	2.08	1.36			1.72	3.1	0.1409	
1800	1.89	2.04	1.36			1.72	2.0	0.1424	
2400	1.89	2.04	1.36			1.72	1.5	0.1430	

TABLE STATION NO. 08048450									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX.									
DATE & TIME									
1-LF 2-LF 3-LF 4-LF 5-LF 6-LF 7-LF 8-LF 9-LF 10-LF									
1971 WATER YEAR									
DISCHARGE IN CFS									
ACCUM. WEIGHTED PRECIP. IN.									
ACCUM. RUNOFF IN.									
AUG. 15									
0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0018
1200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0028
1600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0031
1645	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0031
1700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1715	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1730	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1745	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1815	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1830	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1845	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1915	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1930	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2130	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037
2400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0037





STA. NO. 0804850		TARLF		STORM RAINFALL AND RUNOFF RECORD		1971 WATER YEAR	
DAY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.		STORM OF OCT. 23, 1970		ACCUM. DISCHARGE		ACCUM. RUNOFF	
DATE & TIME		GAGE NUMBER		WEIGHTED PRECIP. IN.		CFS IN.	
1-DB							
OCT. 23							
0000	0.0			0.0			
0030	0.0			0.0			
0035	0.07			0.07			
0040	0.46			0.46			
0045	0.73			0.73			
0050	0.86			0.86			
0060	0.94			0.94			
0065	0.96			0.96			
0090	0.98			0.98			
0095	1.00			1.00			
0100	1.01			1.01			
0120	1.03			1.03			
0125	1.05			1.05			
0130	1.07			1.07			
0135	1.04			1.04			
0140	1.10			1.10			
0150	1.11			1.11			
0160	1.12			1.12			
0170	1.12			1.12			
0180	1.12			1.12			
0190	1.12			1.12			
0200	1.12			1.12			
0210	1.12			1.12			
0220	1.12			1.12			
0230	1.12			1.12			
0240	1.12			1.12			
0250	1.12			1.12			
0260	1.12			1.12			
0270	1.12			1.12			
0280	1.12			1.12			
0290	1.12			1.12			
0300	1.12			1.12			
0310	1.12			1.12			
0320	1.12			1.12			
0330	1.12			1.12			
0340	1.12			1.12			
0350	1.12			1.12			
0360	1.12			1.12			
0370	1.12			1.12			
0380	1.12			1.12			
0390	1.12			1.12			
0400	1.12			1.12			
0410	1.12			1.12			
0420	1.12			1.12			
0430	1.12			1.12			
0440	1.12			1.12			
0450	1.12			1.12			
0460	1.12			1.12			
0470	1.12			1.12			
0480	1.12			1.12			
0490	1.12			1.12			
0500	1.12			1.12			
0510	1.12			1.12			
0520	1.12			1.12			
0530	1.12			1.12			
0540	1.12			1.12			
0550	1.12			1.12			
0560	1.12			1.12			
0570	1.12			1.12			
0580	1.12			1.12			
0590	1.12			1.12			
0600	1.12			1.12			
0610	1.12			1.12			
0620	1.12			1.12			
0630	1.12			1.12			
0640	1.12			1.12			
0650	1.12			1.12			
0660	1.12			1.12			
0670	1.12			1.12			
0680	1.12			1.12			
0690	1.12			1.12			
0700	1.12			1.12			
0710	1.12			1.12			
0720	1.12			1.12			
0730	1.12			1.12			
0740	1.12			1.12			
0750	1.12			1.12			
0760	1.12			1.12			
0770	1.12			1.12			
0780	1.12			1.12			
0790	1.12			1.12			
0800	1.12			1.12			
0810	1.12			1.12			
0820	1.12			1.12			
0830	1.12			1.12			
0840	1.12			1.12			
0850	1.12			1.12			
0860	1.12			1.12			
0870	1.12			1.12			
0880	1.12			1.12			
0890	1.12			1.12			
0900	1.12			1.12			
0910	1.12			1.12			
0920	1.12			1.12			
0930	1.12			1.12			
0940	1.12			1.12			
0950	1.12			1.12			
0960	1.12			1.12			
0970	1.12			1.12			
0980	1.12			1.12			
0990	1.12			1.12			
1000	1.12			1.12			
1010	1.12			1.12			
1020	1.12			1.12			
1030	1.12			1.12			
1040	1.12			1.12			
1050	1.12			1.12			
1060	1.12			1.12			
1070	1.12			1.12			
1080	1.12			1.12			
1090	1.12			1.12			
1100	1.12			1.12			
1110	1.12			1.12			
1120	1.12			1.12			
1130	1.12			1.12			
1140	1.12			1.12			
1150	1.12			1.12			
1160	1.12			1.12			
1170	1.12			1.12			
1180	1.12			1.12			
1190	1.12			1.12			
1200	1.12			1.12			
1210	1.12			1.12			
1220	1.12			1.12			
1230	1.12			1.12			
1240	1.12			1.12			
1250	1.12			1.12			
1260	1.12			1.12			
1270	1.12			1.12			
1280	1.12			1.12			
1290	1.12			1.12			
1300	1.12			1.12			
1310	1.12			1.12			
1320	1.12			1.12			
1330	1.12			1.12			
1340	1.12			1.12			
1350	1.12			1.12			
1360	1.12			1.12			
1370	1.12			1.12			
1380	1.12			1.12			
1390	1.12			1.12			
1400	1.12			1.12			
1410	1.12			1.12			
1420	1.12			1.12			
1430	1.12			1.12			
1440	1.12			1.12			
1450	1.12			1.12			
1460	1.12			1.12			
1470	1.12			1.12			
1480	1.12			1.12			
1490	1.12			1.12			
1500	1.12			1.12			
1510	1.12			1.12			
1520	1.12			1.12			
1530	1.12			1.12			
1540	1.12			1.12			
1550	1.12			1.12			
1560	1.12			1.12			
1570	1.12			1.12			
1580	1.12			1.12			
1590	1.12			1.12			
1600	1.12			1.12			
1610	1.12			1.12			
1620	1.12			1.12			
1630	1.12			1.12			
1640	1.12			1.12			
1650	1.12			1.12			
1660	1.12			1.12			
1670	1.12			1.12			
1680	1.12			1.12			
1690	1.12			1.12			
1700	1.12			1.12			
1710	1.12			1.12			
1720	1.12			1.12			
1730	1.12			1.12			
1740	1.12			1.12			
1750	1.12			1.12			
1760	1.12			1.12			
1770	1.12			1.12			
1780	1.12			1.12			
1790	1.12			1.12			
1800	1.12			1.12			
1810	1.12			1.12			
1820	1.12			1.12			
1830	1.12			1.12			
1840	1.12			1.12			
1850	1.12			1.12			
1860	1.12			1.12			
1870	1.12			1.12			
1880	1.12			1.12			
1890	1.12			1.12			
1900	1.12			1.12			
1910	1.12			1.12			
1920	1.12			1.12			
1930	1.12			1.12			
1940	1.12			1.12			
1950	1.12			1.12			
1960	1.12			1.12			
1970	1.12			1.12			
1980	1.12			1.12			
1990	1.12			1.12			
2000	1.12			1.12			

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

TABLE 1-104									
STATION NO. 04048550									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF MAY 29, 1971									
STORM RAINFALL AND RUNOFF RECORD									
1971 WATER YEAR									
DATE & TIME	1-104	IN.	PRECIP.	ACCUM.	DISCHARGE	IN.	CFS	IN.	IN.
MAY 29									
0000	0.0			0.0					
0430	0.0			0.0					
0500	0.02			0.02					
0530	0.06			0.06					
0600	0.10			0.10					
0630	0.22			0.22					
0700	0.26			0.26					
0705	0.29			0.29					
0710	0.49			0.49					
0715	0.66			0.66					
0720	0.81			0.81					
0725	0.90			0.90			33.0		
0730	0.92			0.92			40.0		
0735	0.94			0.94			64.0		
0740	0.99			0.99			97.0		
0745	1.02			1.02			120.0		
0750	1.04			1.04			126.0		
0755	1.06			1.06			123.0		
0800	1.07			1.07			113.0		
0805	1.08			1.08			102.0		
0810	1.09			1.09			91.0		
0820	1.09			1.09			75.0		
0830	1.10			1.10			59.0		
0840	1.12			1.12			47.0		
0850	1.14			1.14			38.0		
0955	1.17			1.17			35.0		
0900	1.19			1.19			33.0		
0930	1.24			1.24					
1000	1.32			1.32					
1145	1.35			1.35					
1200	1.37			1.37					
1930	1.37			1.37					
2000	1.40			1.40					
2400	1.40			1.40					

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

STATION NO. 0604550									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
1971 WATER YEAR									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF AUG. 15, 1971									
PRECIP. IN. CFS IN. ACCUM. FIGHTED IN. RUNOFF ACCUM. IN.									
DATE & TIME	1-04								
AUG. 15									
0000	0.0						0.0		
0600	0.0						0.0		
1630	0.0						0.0		
1645	0.02						0.02		
1705	0.13						0.13		
1715	0.62						0.62		
1725	1.12						1.12		
1730	1.24						1.24		
1745	1.52						1.52		
1750	1.52						1.52		
1755	1.53						1.53		
1800	1.53						1.53		
1805	1.53						1.53		
1810	1.54						1.54		
1815	1.54						1.54		
1820	1.54						1.54		
1830	1.54						1.54		
1840	1.54						1.54		
1850	1.54						1.54		
1900	1.54						1.54		
1910	1.54						1.54		
1920	1.54						1.54		
1930	1.54						1.54		
1940	1.54						1.54		
1950	1.54						1.54		
2000	1.54						1.54		
2005	1.54						1.54		
2100	1.54						1.54		
2400	1.54						1.54		

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

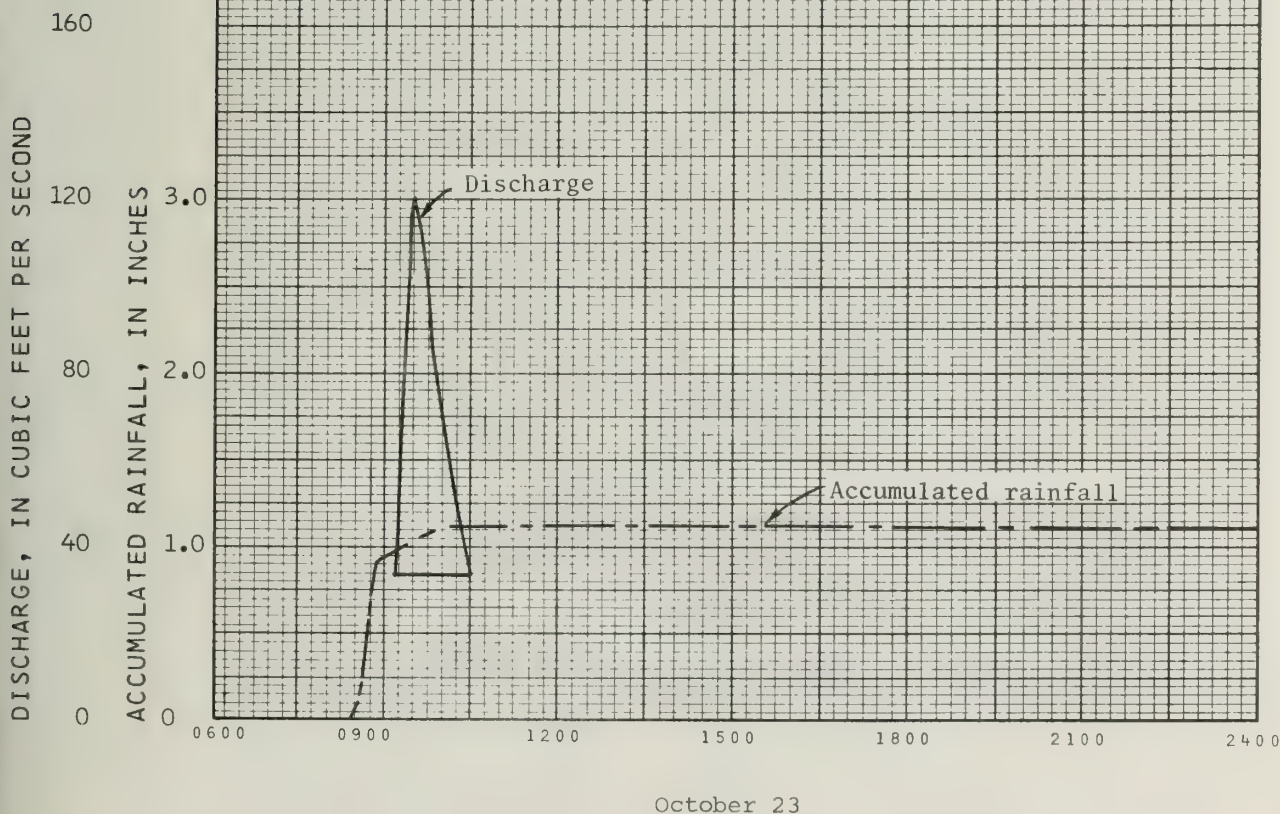
HYDROGRAPH and MASS CURVES
for

STORM OF OCTOBER 23, 1970
at

DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS

Drainage Area 1.08 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

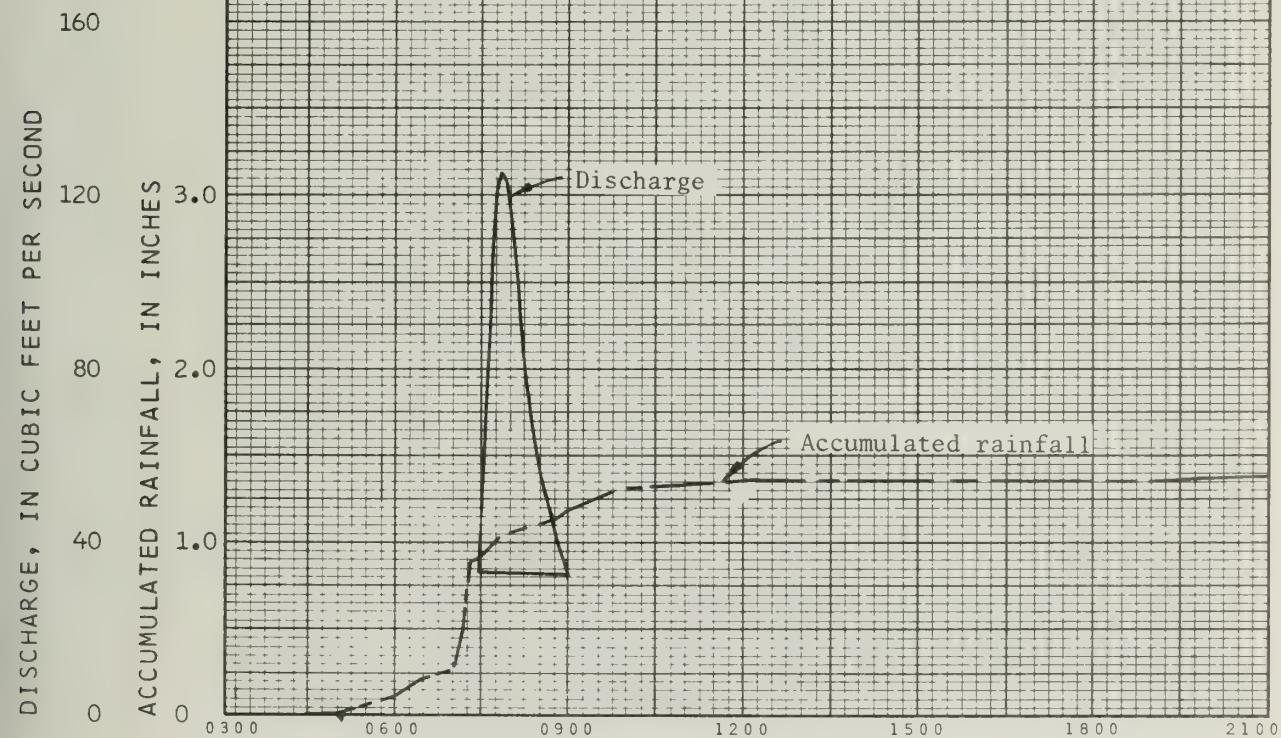
Storm runoff for period = -- ac-ft.



HYDROGRAPH and MASS CURVES
for
STORM OF MAY 29, 1971
at
DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS

Drainage Area 1.08 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

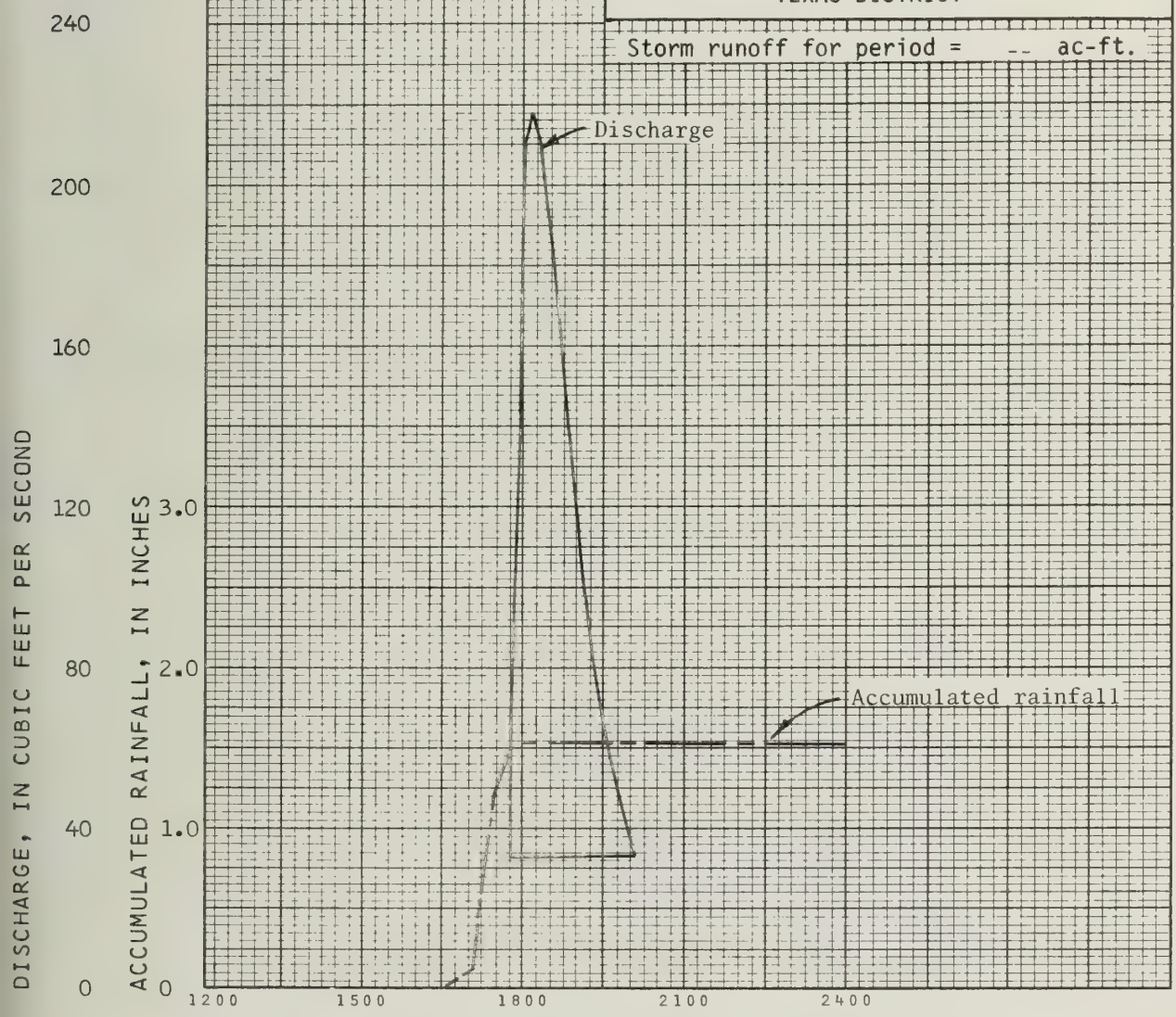


May 29

HYDROGRAPH and MASS CURVES
 for
 STORM OF AUGUST 15, 1971
 at
 DRY BRANCH AT BLANDIN STREET,
 FORT WORTH, TEXAS

 Drainage Area 1.08 sq mi
 UNITED STATES GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 TEXAS DISTRICT

Storm runoff for period = -- ac-ft.



August 15

TABLE									
STATION 68048201									
STATION MAINFALL AND WINDOFF RECORD									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 420, FT. WORTH, TEX. STORM OF MAY 29, 1971									
DATE & TIME	1-IF	2-IF	1	2-IF	1	2-IF	1	2-IF	1
MAY 29									
0000	0.0	0.0		0.0					
0430	0.0	0.0		0.0					
0500	0.04	0.02		0.04					
0530	0.11	0.07		0.11					
0600	0.17	0.14		0.17					
0630	0.31	0.26		0.31					
0700	0.62	0.40		0.62					
0715	0.93	1.01		0.93					
0730	1.37	1.55		1.37					
0745	1.45	1.64		1.45					
0800	1.49	1.70		1.49					
0815	1.51	1.72		1.51					
0830	1.52	1.74		1.52					
0845	1.54	1.76		1.54					
0900	1.57	1.79		1.57					
0930	1.64	1.90		1.64					
1000	1.76	1.98		1.76					
1100	1.78	2.00		1.78					
1115	1.78	2.00		1.78					
1130	1.79	2.00		1.79					
1200	1.80	2.00		1.80					
1300	1.80	2.00		1.80					
1400	1.80	2.00		1.80					
1500	1.80	2.00		1.80					
1600	1.80	2.00		1.80					
1715	1.80	2.00		1.80					
1800	1.80	2.00		1.80					
1900	1.80	2.00		1.80					
2000	1.80	2.00		1.80					
2100	1.80	2.00		1.80					
2200	1.80	2.00		1.80					
2300	1.80	2.00		1.80					
2400	1.80	2.00		1.80					

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

STATION NO. 04048320									
TABLE 1									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX.									
STORM OF AUG. 6, 1971									
STORM RAINFALL AND RUNOFF RECORD									
1971 WATER YEAR									
DATE & TIME									
PRECIP. IN. CFS									
1-LF 2-LF									
AUG. 6									
0000	0.0	0.0					0.0	0.0	*****
1130	0.0	0.0					0.0	0.0	*****
1145	0.0	0.0					0.0	0.0	*****
1200	0.0	0.23					0.04	0.10	*****
1215	0.03	0.34					0.13	0.10	*****
1225	0.03	0.45					0.14	0.13	*****
1230	0.03	0.71					0.24	0.14	*****
1245	0.04	0.84					0.27	0.24	*****
1300	0.03	1.03					0.33	0.27	*****
1315	0.03	1.24					0.37	0.33	*****
1330	0.03	1.43					0.39	0.37	*****
1345	0.03	1.51					0.39	0.39	*****
1400	0.03	1.51					0.39	0.39	*****
1415	0.03	1.51					0.39	0.39	*****
1430	0.03	1.51					0.39	0.39	*****
1445	0.03	1.55					0.40	0.39	*****
1500	0.03	1.57					0.40	0.40	*****
2400	0.03	1.57					0.40	0.40	*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

250

230

210

190

170

150

130

110

90

70

50

30

0

DISCHARGE, IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

2.0

1.0

0

0 0000

0 3000

0 6000

0 9000

1 2000

1 5000

1 8000

2 1000

2 4000

May 29

HYDROGRAPH and MASS CURVES

for

STORM OF MAY 29, 1971

at

LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS

Drainage Area 5.64 sq mi

UNITED STATES GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

Accumulated rainfall

Discharge

HYDROGRAPH and MASS CURVES
for
STORM OF AUGUST 6, 1971
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 sq mi
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = -- ac-ft.

Discharge

Accumulated rainfall

DISCHARGE, IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

0900 1200 1500 1800 2100 2400

August 6

Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1972

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Open-file report



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UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Prepared in cooperation with the City of Fort Worth

Hydrologic Data for Urban Studies in the Fort Worth, Texas, Metropolitan Area 1972

By B. B. Hampton

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Open-file report



Prepared in cooperation with the City of Fort Worth

June 1974

Copies of this report may be obtained from
I. D. Yost, District Chief, U.S. Geological
Survey, Federal Building, 300 East 8th Street
Austin, TX 78701

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HYDROLOGIC DATA FOR URBAN STUDIES IN THE
FORT WORTH, TEXAS METROPOLITAN AREA

1972

By

B. B. Hampton
U.S. Geological Survey

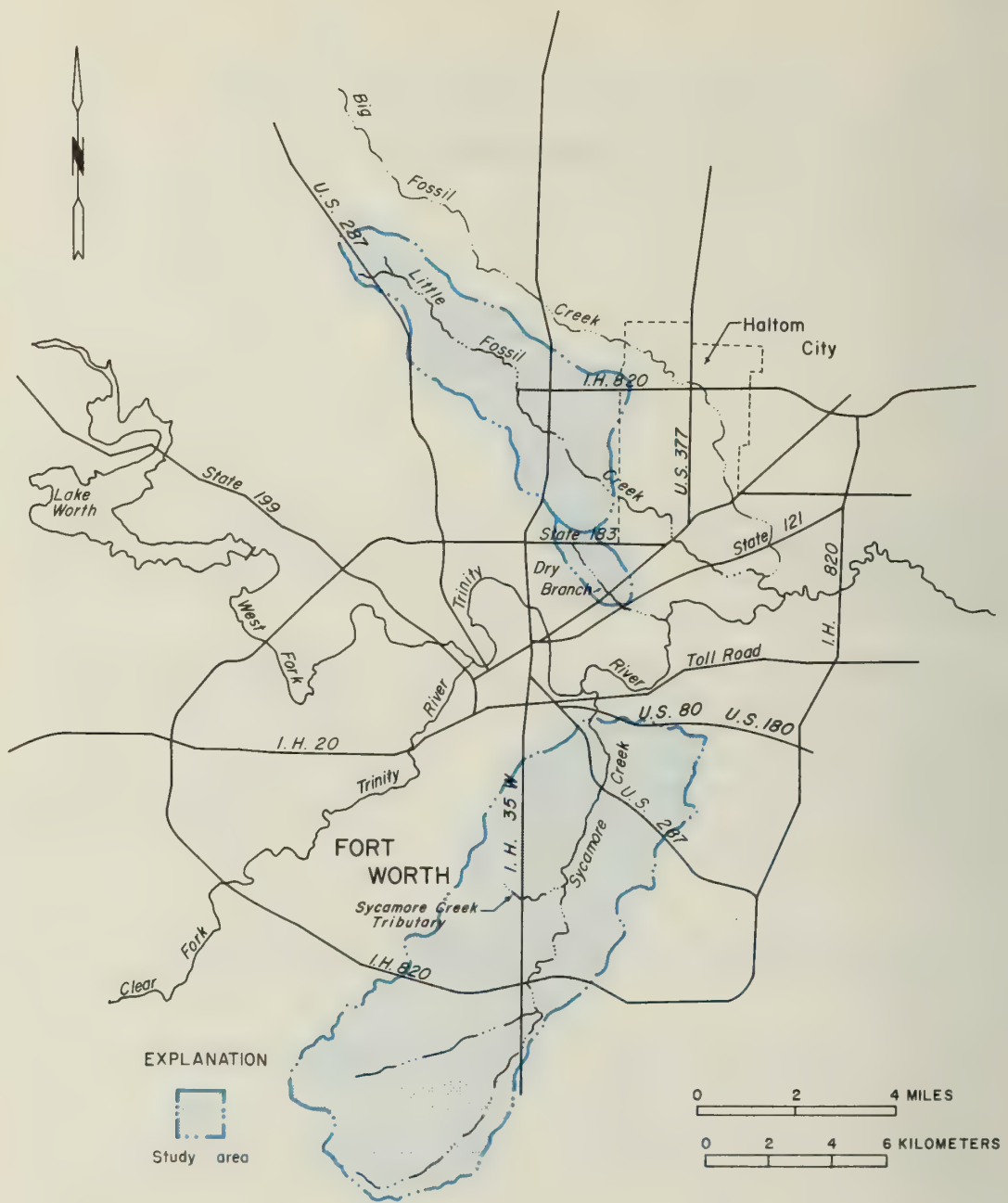
INTRODUCTION

Hydrologic investigations of urban areas in Texas were begun by the U.S. Geological Survey in 1954. These investigations are now in progress in several major metropolitan areas including Austin, Dallas, Dallas County, Houston, and San Antonio.

In October 1968, the Geological Survey in cooperation with the city of Fort Worth Department of Public Works began a program of hydrologic investigations on several small streams in Fort Worth. The investigations are designed to evaluate factors affecting floods on small streams in the metropolitan area. Studies of additional streams, one of which drains beneath the impervious area of a shopping center, were added to the program in October 1969. The objectives of the program are:

1. To determine, on the basis of historical data and hydrologic analyses, the magnitude and frequency of floods.
2. To document and define the areal extent of floods of greater than ordinary magnitude.
3. To determine the effect of urban development on flood peaks and volume.

This report is the fourth in a series of reports to be published annually for the Fort Worth area as part of a continuing program. The report presents the basic hydrologic data collected in four study areas during the 1972 water year (October 1, 1971, to September 30, 1972). The four study areas within the metropolitan area are Sycamore Creek, Sycamore Creek tributary, Dry Branch, and Little Fossil Creek (fig. 1). The Sycamore Creek tributary study area includes the highly impervious area of the Seminary South Shopping Center (fig. 1) as a subarea.



Base from General Highway
map of Texas

FIGURE 1.— Locations of Sycamore Creek, Sycamore Creek tributary, Dry Branch, and Little Fossil Creek study areas

To facilitate the publication and distribution of this report at the earliest feasible time, certain material contained herein does not conform to the formal publication standards of the U.S. Geological Survey.

For those readers interested in using the metric system, metric equivalents of English units of measurements are given in parentheses. The English units used in this report may be converted to metric units by the following conversion factors:

From		Multiply by	To obtain	
Unit	Abbrevi- ation		Unit	Abbrevi- ation
inch	in	25.4	millimetre	mm
foot	ft	0.3048	metre	m
mile	mi	1.609	kilometre	km
square mile	mi ²	2.590	square kilometre	km ²
cubic foot per second	ft ³ /s	28.32	cubic decimetre per second	dm ³ /s
		0.02832	cubic metre per second	m ³ /s
foot per mile	ft/mi	0.3048/1.609	metre per kilometre	m/km
acre-foot	ac-ft	1233	cubic metre	m ³
		1.233 x 10 ⁻³	cubic hectometre	hm ³

WATERSHED FEATURES

Sycamore Creek and Sycamore Creek Tributary Study Areas

Sycamore Creek (fig. 2) is located south and east of downtown Fort Worth in south-central Tarrant County. The headwaters originate in a rural area in the southwest section of Fort Worth. Parts of this rural area are being urbanized. The stream flows northeastwardly in an open channel and passes beneath Interstate Highway 35-W to southeast Fort Worth. The stream continues its northeasterly course through residential and light industrial sections of the near-east side of Fort Worth and on into the West Fork Trinity River. The creek decreases in altitude from approximately 840 feet (256 metres) above mean sea level at the headwaters to 630 feet (192 metres) at Interstate Highway 35-W, a distance of 8.2 miles (13.2 kilometres). The creek decreases in altitude from 630 feet (192 metres) at Interstate Highway 35-W to 496 feet (151 metres) at U.S. Highways 80 and 180 (0.9 mile or 1.4 kilometres upstream from West Fork Trinity River), a distance of 7.8 miles (12.6 kilometres). The altitude at the mouth of Sycamore Creek is about 489 feet (149 metres) above mean sea level.

Sycamore Creek tributary (fig. 2) is within the Sycamore Creek drainage basin. The tributary is in the south-central section of Fort Worth. The headwaters originate approximately 1.3 miles (2.1 kilometres) west of Seminary South Shopping Center (fig. 2). A storm-water drainage system collects runoff from a residential-park area through street-gutter inlets upstream from Hemphill Street (fig. 2). The tributary flows easterly through a system of open channel and pipe-arch and box culverts. Storm water from the shopping center, two peripheral residential-commercial areas, and Interstate Highway 35-W flows into the underground drainage system.

Sycamore Creek tributary decreases in altitude from approximately 760 feet (232 metres) above mean sea level at the headwaters to approximately 649 feet (198 metres) at the west edge of Seminary South Shopping Center, a distance of 1.3 miles (2.1 kilometres). At the western edge of the shopping center and at the entrance of the underground pipe-arch culvert, the altitude changes abruptly from 649 to 643 feet (198 to 196 metres) in a distance of about 25 feet (8 metres). The tributary then decreases in altitude from 643 feet (196 metres) at the entrance to 618.7 feet (189 metres) at the downstream side of Interstate Highway 35-W, a distance of approximately 0.7 mile (1.1 kilometres).

The Seminary South Shopping Center contains many retail business establishments, large parking areas, and one high-rise building. The flat roofs of many buildings are topped with aggregate, and considerable storage of water can occur on the rooftops. The drainage system in the center is composed of gutter inlets connected to many subsurface concrete lateral pipes, each pipe feeds a main. The mains drain into a central concrete-arch culvert beneath the center. Runoff (estimated) from the shopping center is the differences of routed runoff between the gaging stations above (No. 08048530) and below (No. 08048540) the shopping center. Monthly rainfall and runoff data of the impervious area of the shopping center are presented in table 1.

Dry Branch and Little Fossil Creek Study Areas

Dry Branch (fig. 3) is located in the northeast part of Fort Worth in Tarrant County. The headwaters originate 1.3 miles (2.1 kilometres) northwest of the Fort Worth Refinery. The stream upstream from the refinery flows southeasterly in an open channel and through a culvert beneath the refinery. Downstream from the refinery the stream flows southeastwardly through a residential section for about 3.0 miles (4.8 kilometres) to the West Fork Trinity River. The stream decreases in altitude from approximately 635 feet (194 metres) above mean sea level at the headwaters above the Fort Worth Refinery to 538.5 feet (164.1 metres) at Fain Street, a distance of 3.6 miles (5.8 kilometres).

Little Fossil Creek (fig. 3) is located north of downtown Fort Worth in north-central Tarrant County. The headwaters originate in a rural area northwest of Saginaw, and the stream flows in an open channel southeasterly past Saginaw, through the Greater Southwest Corporation Industrial Park, and into the northeastern part of Fort Worth. The stream continues its southeasterly course from Fort Worth through Haltom City to Big Fossil Creek, and on into the West Fork Trinity River (fig. 1). The creek decreases in altitude from approximately 810 feet (247 metres) above mean sea level at the headwaters north of Saginaw to 550 feet (168 metres) at Mesquite Street in northeast Fort Worth, a distance of 9.3 miles (14.9 kilometres).

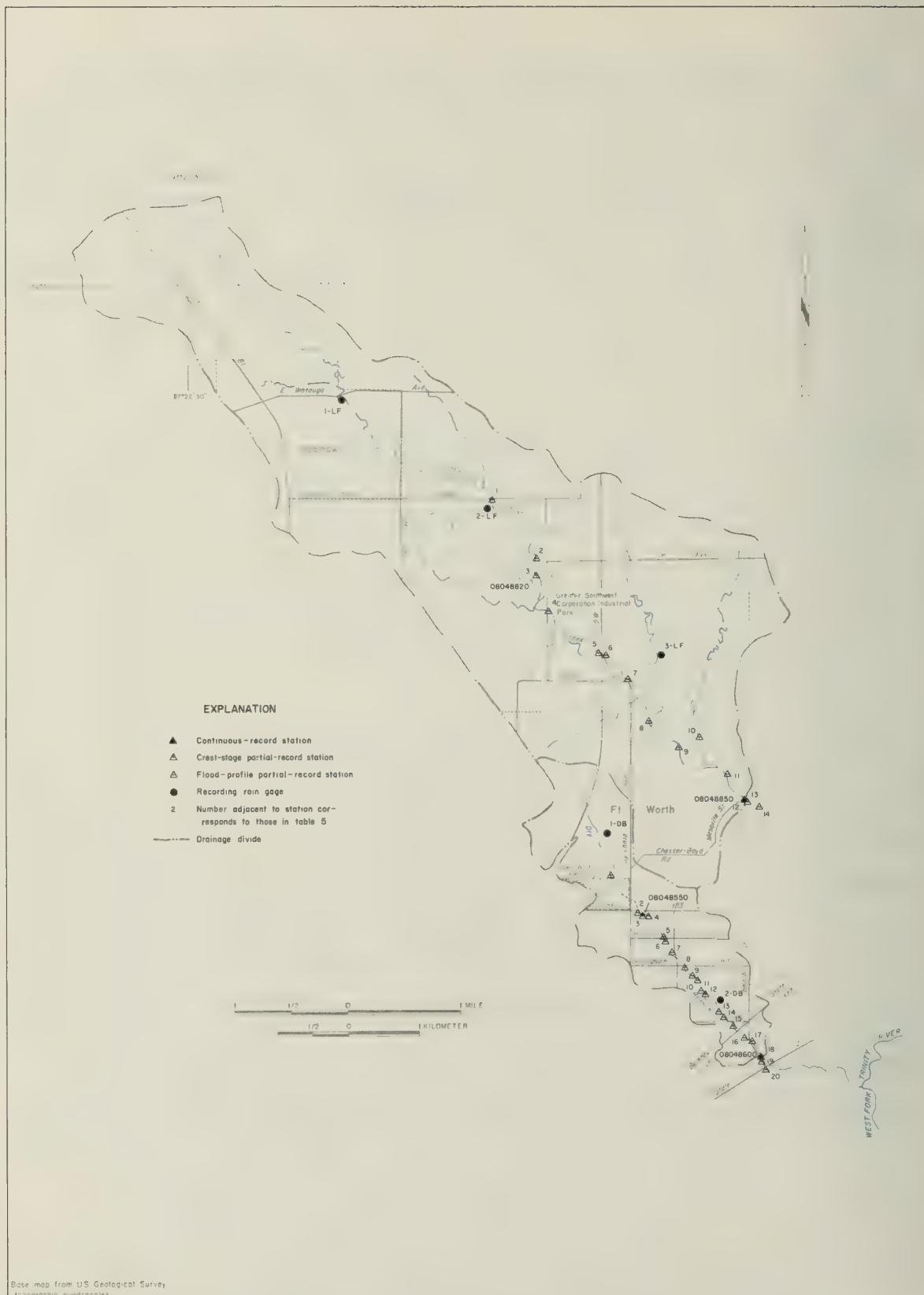
HYDROLOGIC INSTRUMENTS

Instruments to collect rainfall, runoff, and flood-profile data in the Sycamore Creek study area consist of 3 recording rain gages, 1 continuous-record stream-gaging station, and 16 flood-profile partial-record gages.

Table 1.--Summary of monthly rainfall-runoff relationship for the 1972 water year for the Seminary South Shopping Center

Month	(2-ST) Rainfall (inches)	Runoff (inches) <u>1/</u>	Ratio of runoff to rainfall <u>1/</u>
<u>1971</u>			
October	8.35	5.97	0.71
November	2.16	1.35	.62
December	6.39	5.27	.82
<u>1972</u>			
January	.79	.64	.81
February	.22	.68	--
March	.54	.59	--
April	5.00	2.41	.48
May	1.90	.58	.31
June	1.58	.79	.50
July	.35	.23	.66
August	1.72	.82	.48
September	2.13	.62	.29
Totals	31.13	19.95	0.64

1/ Data unadjusted for sustained low-flow effluents from the shopping center.



Instruments to collect rainfall and runoff data in the Sycamore Creek tributary study area consist of two recording rain gages and two continuous-record stream-gaging stations.

Instruments to collect rainfall, runoff, and flood-profile data in the Dry Branch study area consist of 2 recording rain gages, 1 continuous-record stream-gaging station, 1 crest-stage partial-record station, and 16 flood-profile partial-record gages.

Instruments to collect rainfall, runoff, and flood-profile data in the Little Fossil Creek study area consist of 3 recording rain gages, 1 continuous-record stream-gaging station, 1 crest-stage partial-record station, and 11 flood-profile partial-record gages.

In the Little Fossil Creek and Dry Branch basins, three supplemental crest-stage flood-profile stations are located downstream from the study areas to provide additional floodflow elevations in the vicinity of the gaging stations.

Locations of hydrologic instruments in the study areas are shown on figures 2 and 3. Pertinent individual station information is included in the section "Compilation of data".

DATA COLLECTION AND EXPLANATION

Rainfall

Ten recording rain gages distributed throughout the four study areas provide a measure of total rainfall and are used to define rainfall intensities.

In this report, rainfall is compiled on a daily basis to facilitate comparison with the Environmental Data Service records, comparisons among study-area rain gages, and potential use in mathematical rainfall-runoff models.

Weighted-mean rainfall for a study area is determined by the Thiessen method using gages located within a particular drainage boundary. In some areas, the Thiessen weight values are nearly equal and rainfall amounts are arithmetically averaged. Equations used to compute weighted-mean rainfall for the area above each continuous-record stream-gaging or crest-stage partial-record station are summarized in table 2.

Table 2.--Equations used to compute weighted-mean rainfall for the area above each continuous-record stream-gaging or crest-stage partial-record station

Station	USGS gage identification No.	Weighted-mean rainfall equation
Sycamore Creek at Interstate Highway 35-W	08048520	$(0.33)(1-SC) + (0.48)(2-SC) + (0.19)(3-SC)$
Sycamore Creek tributary above Seminary South Shopping Center	08048530	$(0.78)(1-ST) + (0.22)(2-ST)$
Sycamore Creek tributary at Interstate Highway 35-W	08048540	$(0.56)(1-ST) + (0.44)(2-ST)$
Seminary South Shopping Center	--	$(1.00)(2-ST)$
Dry Branch at Blandin Street	08048550	$(1.00)(1-DB)$
Dry Branch at Fain Street	08048600	$(0.50)(1-DB) + (0.50)(2-DB)$
Little Fossil Creek at Interstate Highway 820	08048820	$(0.76)(1-LF) + (0.24)(2-LF)$
Little Fossil Creek at Mesquite Street	08048850	$(0.34)(1-LF) + (0.25)(2-LF) + (0.41)(3-LF)$

Note: For locations of stations by the U.S. Geological Survey Identification Number, see figs. 2 and 3. Rain gage designations are SC-Sycamore Creek area, ST-Sycamore Creek tributary area, DB-Dry Branch area, and LF-Little Fossil Creek area; for rain gage locations, see figs. 2 and 3.

Runoff

Runoff data are based on discharge measurements and stage records at 7 stream-gaging locations and peak elevations at 46 flood-profile locations. Of the seven stream-gaging locations, five are continuous-record stream-gaging stations and two are crest-stage partial-record gaging stations.

A water-stage recorder at a continuous-record stream-gaging station records the full range in stage, which together with measurements of streamflow allows the computation of total runoff at the station.

A water-stage recorder at a crest-stage partial-record gaging station records only stages above a selected elevation, which together with measurements of streamflow allows computation of the upper part of the runoff hydrograph. These stations are located at sites where limited streamflow data collected systematically over a period of years are needed.

A crest-stage flood-profile gage, located at selected sites along the stream or on tributaries, records the peak water stage reached during the passage of a flood.

The purpose of the two continuous-record stream-gaging stations, located in the Sycamore Creek tributary basin (fig. 2), is (1) to collect hydrologic data from the residential-park area west of Seminary South Shopping Center (upstream station), and (2) to collect hydrologic data from both the residential-park area and the shopping center (downstream station). The difference in runoff between these two stations equals the runoff from the impervious area of the shopping center. Sustained low-flow occurs as a result of industrial effluents.

Information on monthly runoff (volumetric) and selected individual storm runoff from the shopping center is presented in later sections of this report. Analyses of an individual storm at the shopping center requires routing the discharge shown by the upstream hydrograph to the downstream station by using estimated travel times of 5 to 50 minutes (depending upon upstream discharge). It is assumed that little or no attenuation of upstream discharge occurs. The routed discharges are deducted from the downstream discharges; these differences equal the discharges (estimated) from the impervious area of the shopping center. Table 1 presents a summary of rainfall-runoff relationships for the current year at Seminary South Shopping Center.

SUMMARY OF DATA FOR THE 1972 WATER YEAR

Each year, storm events that will be useful in achieving the objective of the study are selected for detailed rainfall-runoff analysis. The event during which the annual maximum discharge occurs is usually included in the selection. A digital computer was used to aid in the processing of some of the individual station storm data.

During the 1972 water year, storms selected for analysis occurred on October 19-20, December 8, 9-10, 1971, and April 29, 1972 in the Sycamore Creek basin; October 19-20, December 8, 9-10, 1971, and April 29, 1972 in the Sycamore Creek tributary basin; October 19-20, December 2, and 9-10, 1971 in the Dry Branch basin; October 19-20, December 2-3, and 8-10, 1971 in the Little Fossil Creek basin.

Summaries of storm rainfall-runoff data for selected individual storms at streamflow stations and crest-stage partial-record stations are given in tables 3 and 4, respectively. Detailed storm rainfall and runoff records, hydrographs, and mass curves for each station are shown in the section "Compilation of data".

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data, at streamflow stations,
1972 water year

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 17.7 mi ²)								
Oct. 19-20, 1971	23	4.90	0.73	1.28	2.17	2.23	0.46	5,450
Dec. 8, 1971	10	1.09	.18	.28	.37	.48	.44	1,170
Dec. 9-10, 1971	20	2.02	.24	.35	.46	1.36	.67	1,170
Apr. 29, 1972	1.8	.66	.24	.46	.63	.26	.39	1,000
08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex. (Drainage area, 0.97 mi ²)								
Oct. 19-20, 1971	23	3.91	.68	1.06	1.39	1.72	.44	584
Dec. 8, 1971	8	1.25	.27	.44	.54	.49	.39	207
Dec. 9-10, 1971	20	2.02	.21	.31	.42	1.31	.65	204
Apr. 29, 1972	3	1.02	.61	.82	.97	.23	.23	313

Table 3.--Storm rainfall-runoff data, at streamflow stations,
1972 water year--Continued

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 1.35 mi ²)								
Oct. 19-20, 1971	23	4.27	0.67	1.21	1.75	2.50	0.59	1,100
Dec. 8, 1971	8	1.25	.27	.44	.54	.63	.50	348
Dec. 9-10, 1971	20	2.02	.21	.31	.42	1.45	.72	294
Apr. 29, 1972	3	1.07	.61	.87	1.02	.37	.35	616
Seminary South Shopping Center (Drainage area, 0.38 mi ²)								
Oct. 19, 1971	23	5.17	1.12	1.80	2.70	4.59	.89	557
Dec. 8, 1971	8	1.25	.27	.44	.54	1.03	.82	156
Dec. 9-10, 1971	20	2.02	.21	.31	.42	1.84	.91	150
Apr. 29, 1972	1.8	1.20	.93	1.05	1.18	.66	.55	395

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.---Storm rainfall-runoff data, at streamflow stations,
1972 water year--Continued

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048600 Dry Branch at Fain Street, Fort Worth, Tex. (Drainage area, 2.15 mi ²)								
Oct. 19-20, 1971	23	3.48	0.65	1.03	1.81	1.38	0.40	352
Dec. 2, 1971	14	1.59	.16	.31	.45	.60	.38	152
Dec. 9-10, 1971	21	2.56	.24	.43	.68	1.63	.64	282
08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex. (Drainage area, 12.3 mi ²)								
Oct. 19-20, 1971	24	2.61	.34	.63	1.07	.81	.31	1,520
Dec. 2-3, 1971	15	1.49	.19	.26	.39	.45	.30	514
Dec. 8-10, 1971	37	3.49	.21	.33	.44	3.07	.88	1,580

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ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 4.--Storm rainfall-runoff data, at crest-stage partial-record stations, 1972 water year

Date of Storm	Duration (hours)	Total	Rainfall (inches)				Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment						
			15-minute	30-minute	60-minute				
08048550 Dry Branch at Blandin Street, Fort Worth, Tex. (Drainage area, 1.08 mi ²)									
Oct. 19, 1971	24	3.22	0.71	0.98	1.62	--	--	422	
Dec. 2, 1971	13	1.60	.17	.28	.41	--	--	98	
Dec. 9-10, 1971	21	2.41	.27	.46	.61	--	--	198	
08048820 Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. (Drainage area, 5.64 mi ²)									
Oct. 19-20, 1971	23	2.22	.29	.40	.64	--	--	151	
Dec. 2, 1971	13	1.40	.14	.26	.37	--	--	168	
Dec. 8-10, 1971	37	3.75	.26	.41	.58	3.24	.86	632	

Yearly rainfall and runoff for the 1972 water year for the study areas with continuous record-gaging stations in the Fort Worth metropolitan area are summarized in the following table:

Station	Yearly mean rainfall (inches)	Yearly runoff (inches)	Ratio of runoff to rainfall
Sycamore Creek at Inter- state Highway 35-W (08048520)	32.16	7.70	0.24
Sycamore Creek tributary above Seminary South Shopping Center (08048530)	28.59	8.81	.31
Sycamore Creek tributary at Interstate Highway 35-W (08048540)	29.30	11.94	.41
Seminary South Shopping Center	31.13	19.94	.64
Dry Branch at Fain Street (08048600)	28.02	8.86	.32
Little Fossil Creek at Mesquite Street (08048850)	26.43	6.16	.23

NOTE: See "Remarks" paragraph of station descriptions in the section "Compilation of data" for information about regulation or diversion.

Other data, including daily and monthly rainfall and daily and monthly runoff for the 1972 water year, are included in the section "Compilation of data". In addition, flood-profile data for storms during the water year are listed in table 5.

Table 5.--Peak elevations at flood-profile partial-record and continuous-record stations, 1972 water year

Map No.	Station No.	Station name and location of floodmark 1/	Drainage area (mi ²)	Distance above mouth (miles) 2/	Flood elevations		
					Oct. 19 1971	Dec. 9 1971	April 27 1972
Sycamore Creek basin							
1		Sycamore Creek at Sycamore School Road-UsLb	-	11.5	694.80	693.97	691.29
2		Sycamore Creek near intersection of Trimble Drive and Hallmark Drive (Hallmark Addition)-Lb	-	10.5	677.50	674.77	672.14
3		Sycamore Creek at Hemphill Street-UsRb	-	9.2	651.61	<648.05	646.09
4		Sycamore Creek tributary at Sycamore Creek Road-UsLb	-	-	672.40	668.80	668.94
5	08048520*	Sycamore Creek at Interstate Highway 35-W-UsLb	17.7	8.7	639.77	634.20	634.58
6		Sycamore Creek at Interstate Highway 820-DsRb	-	8.3	633.50	628.49	627.50
7		Sycamore Creek at Oak Grove Road-DsLb	-	7.7	621.20	617.43	616.63
8		Sycamore Creek below Missouri-Pacific RR-1,500 ft DsLb	-	7.2	612.12	606.51	606.04
9		Sycamore Creek at Seminary Drive-UsRb	-	6.3	589.94	587.93	587.39
10		Sycamore Creek at Butler Street (extension)-225 ft DsLb	-	5.5	579.42	572.97	571.61
11		Sycamore Creek at Riverside Drive-UsRb	-	4.8	567.64	<563.20	-
12		Sycamore Creek at Glen Garden Drive-UsRb	-	4.2	558.15	<553.08	550.78
13		Sycamore Creek in Cobb Park midway between Glen Garden Drive and U.S. Highway 287-Lb	-	3.7	549.59	<545.32	541.82
14		Sycamore Creek at U.S. Highway 287-DsRb	-	3.0	543.69	537.32	534.82
15		Sycamore Creek at West Rosedale Street-DsRb	-	2.2	531.80	<525.68	523.38
16		Sycamore Creek at Vickery Boulevard-UsLb	-	1.7	526.81	517.90	513.73
17		Sycamore Creek at Lancaster Avenue-UsLb	-	.9	510.66	<506.89	-
Dry Branch basin							
1		Dry Branch at Texas and Pacific RR spur-Rb	-	3.41	597.52	<596.97	-
2		Dry Branch at Grace Street-DsLb	-	2.86	588.95	587.67	-
3	08048550†	Dry Branch at Blandin Street 24 ft UsLb	1.08	2.82	588.48	586.99	586.01
4		Dry Branch at Blandin Street-DsLb	-	2.80	588.35	586.91	-
5		Dry Branch at Hollis Street-60 ft UsRb	-	2.52	587.30	584.63	582.32
6		Dry Branch at Hollis Street-10 ft DsLb	-	2.49	584.71	581.84	580.09
7		Dry Branch at Selma Street-120 ft UsLb	-	2.38	584.55	581.62	579.39
8		Dry Branch at Springdale-DsRb	-	2.18	573.17	570.25	568.00
9		Dry Branch at Bonnie Brae-80 ft UsLb	-	2.07	573.05	569.73	567.19
10		Dry Branch between Bonnie Brae and Aster Court -100 ft UsRb	-	1.98	569.99	567.30	565.19
11		Dry Branch at Carnation Street-20 ft UsRb	-	1.89	568.16	565.30	563.30
12		Dry Branch at Carnation Street-100 ft DsLb	-	1.85	563.32	564.37	562.81
13		Dry Branch at Robinwood Street-150 ft UsRb	-	1.65	561.68	563.16	560.37
14		Dry Branch between Robinwood and Yucca Streets -150 ft UsLb	-	1.56	558.78	557.74	555.24
15		Dry Branch between Yucca and Belknap Streets-Rb	-	1.46	555.48	554.93	552.86
16		Dry Branch at Beach Street-UsLb	-	1.29	546.09	544.62	543.58
17		Dry Branch at Beach Street-DsRb	-	1.23	544.02	543.31	542.96
18	08048600*	Dry Branch at Fain Street-UsRb	2.15	1.08	542.61	542.03	540.63
19		Dry Branch at Fain Street-DsRb	-	1.06	541.52	540.00	-
20		Dry Branch at State Highway 121-UsLb	-	.99	540.50	538.74	538.66
Little Fossil Creek basin							
1		Little Fossil Creek at Cantrell-Samson Roads-DsLb	-	8.42	<636.88	639.04	-
2		Little Fossil Creek at Interstate Highway 820-UsRb	-	7.73	<616.60	618.18	-
3	08048820†	Little Fossil Creek at Interstate Highway 820-DsRb	5.64	7.55	612.27	613.89	-
4		Little Fossil Creek at Old Denton Road-DsRb	-	7.14	602.65	605.28	-
5		Little Fossil Creek at Interstate Highway 35-W-UsRb	-	6.35	591.56	593.04	-
6		Little Fossil Creek at Interstate Highway 35-W-DsLb	-	6.26	590.89	592.40	-
7		Little Fossil Creek at Watauga (Sylvania Avenue)-UsLb	-	5.93	585.09	586.59	-
8		Little Fossil Creek midway between Watauga Road and St. Louis Southwestern RR-Rb	-	5.50	<577.56	<577.56	-
9		Little Fossil Creek at St. Louis Southwestern RR-DsRb	-	5.12	569.89	571.25	-
10		Little Fossil Creek tributary at St. Louis Southwestern RR-DsRb	-	-	575.41	574.20	-
11		Little Fossil Creek at Texas and Pacific RR-30 ft DsLb	-	4.54	561.12	561.26	-
12	08048850*	Little Fossil Creek at Mesquite Street-Rb	12.3	4.24	557.23	557.52	-
13		Little Fossil Creek at Beach Street-UsRb	-	4.20	556.82	557.34	-
14		Little Fossil Creek at Beach Street-DsRb	-	4.11	554.01	554.06	-

† Continuous-record station.

Crest-stage partial-record station.

< Less than elevation shown.

1/ Legend to location of floodmark: DS-downstream; Us-upstream; Lb-left bank; Rb-right bank.

2/ Distances above mouth in Dry Branch basin from report "Drainage Master Plan for the city of Fort Worth, Public Works Department, Dry Branch Watershed", March 1967, by Knowlton-Ratliff-English, Consulting Engineers.

C O M P I L A T I O N O F D A T A

TRINITY RIVER BASIN

08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex. 1/

LOCATION.--Lat 32°39'55", long 97°19'16", Tarrant County, on left bank at upstream side of bridge on frontage road on upstream side of Interstate Highway 35-W, 5.8 miles south of Fort Worth City Hall, and 8.9 miles upstream from mouth.

DRAINAGE AREA.--17.7 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 5,450 cfs Oct. 19 (elevation, 639.77 ft); no flow at times.

Period of record: Maximum discharge, 5,450 cfs Oct. 19, 1971 (elevation, 639.77 ft); no flow at times.

Flood of May 6, 1969, reached an elevation of 640.1 ft, from floodmarks (discharge, 5,800 cfs). Flood in 1908 reached an elevation of 645.9 ft, and flood in 1938 reached an elevation of 644.4 ft, from information by State Highway Department.

REMARKS.--Records good except those for period of no elevation record, which are poor. Flow is slightly affected by several small farm ponds on tributaries above station. At times, low flow may be sustained by effluents from commercial establishments. Two recording rain gages are operated in basin above this station, and one recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	0	4.7	27	1.4	.27	.04	4.2	0	.05	0	1.3
2	3.3	0	165	5.2	1.3	.26	.05	3.4	0	.01	0	.06
3	48	0	32	4.0	1.2	.25	.05	1.6	0	.50	0	.04
4	8.8	0	10	3.5	1.1	.11	.17	2.3	0	.11	0	3.4
5	3.0	0	165	3.2	1.0	.05	.06	1.0	0	.06	0	.50
6	1.6	0	59	3.0	.96	.06	.11	17	0	0	0	.04
7	.50	0	35	2.8	.90	.11	.04	37	0	0	0	.01
8	10	0	227	2.7	.84	.17	.03	12	0	0	0	0
9	2.5	0	470	2.6	.80	.11	.03	3.4	0	0	0	0
10	1.2	0	174	2.5	.72	.11	.04	3.0	0	0	0	0
11	.70	0	24	2.4	.68	.17	.04	2.6	0	0	0	0
12	.40	0	16	2.3	.64	.17	.03	14	1.0	0	.70	0
13	.25	0	13	2.2	.60	.25	.02	2.6	.05	.35	.11	0
14	.05	0	36	2.1	.57	.17	5.7	1.3	2.6	.03	.05	0
15	.06	0	30	2.1	.53	.17	3.4	.70	1.0	0	.01	.35
16	.05	0	13	2.0	.50	.11	.17	.50	1.6	0	0	.35
17	1.3	41	9.4	2.0	.47	.11	.03	.50	.05	0	0	.06
18	31	15	7.6	2.0	.45	.06	0	1.3	.03	0	0	.01
19	816	.70	7.0	1.9	.43	.06	0	1.6	.01	0	0	0
20	251	.04	6.9	1.9	.41	1.3	38	.35	.02	0	0	0
21	13	.01	5.2	1.9	.39	4.2	18	.17	1.9	0	0	12
22	7.0	24	5.2	1.9	.37	.17	1.9	.06	.06	0	0	6.4
23	3.0	11	5.2	1.9	.35	.06	.35	.06	.02	0	7.0	1.0
24	1.3	1.3	4.7	1.9	.34	.05	.17	.06	.01	0	1.3	.35
25	.50	.17	4.2	1.9	.33	.05	.11	.05	0	0	4.2	.11
26	.50	.06	4.2	1.9	.31	5.7	.11	.04	0	0	2.6	.05
27	7.6	.04	3.8	3.0	.30	1.6	250	.03	0	0	.06	.01
28	.25	.04	3.4	1.9	.29	.11	52	.02	0	0	.04	0
29	.05	.03	3.4	1.7	.28	.11	121	.03	5.7	0	.03	0
30	.01	3.8	3.0	1.6	-----	.04	9.4	.02	1.3	0	0	0
31	0	-----	2.2	1.5	-----	.04	-----	.01	-----	0	0	-----
TOTAL	1,212.95	97.19	1,549.1	98.5	18.46	16.20	501.05	110.90	15.35	1.11	16.10	26.04
MEAN	39.1	3.24	50.0	3.18	.64	.52	16.7	3.58	.51	.036	.52	.87
MAX	816	41	470	27	1.4	5.7	250	37	5.7	.50	7.0	12
MIN	0	0	2.2	1.5	.28	.04	0	.01	0	0	0	0
CFSM	2.21	.18	2.82	.18	.04	.03	.94	.20	.03	.002	.03	.05
IN.	2.55	.20	3.26	.21	.04	.03	1.05	.23	.03	.002	.03	.05
AC-FT	2,410	193	3,070	195	37	32	994	220	30	2.2	32	52

CAL YR 1971 TOTAL 3,617.67 MEAN 9.91 MAX 816 MIN 0 CFSM .56 IN 7.60 AC-FT 7,180
WTR YR 1972 TOTAL 3,662.95 MEAN 10.0 MAX 816 MIN 0 CFSM .57 IN 7.70 AC-FT 7,270

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-19	0745	633.53	824	12- 9	0945	634.20	1,170
10-19	2115	639.77	5,450	4-27	1930	634.58	1,260
12- 8	1945	634.21	1,170	4-29	0400	633.86	1,000

NOTE.--No elevation record Jan. 26 to Mar. 2.

1/This table reproduced from U.S. Geological Survey, 1972, Water Resources Data for Texas, Part 1, Surface Water Records.

TRINITY RIVER BASIN

08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex. 1/

LOCATION.--Lat 32°41'08", long 97°19'44", Tarrant County, on right bank near entrance to culvert under Missouri, Kansas, and Texas Railroad, 0.2 mile northeast of intersection of Hemphill Street and Seminary Drive in Fort Worth, 1.8 miles upstream from mouth, and 4.5 miles south of Fort Worth City Hall.

DRAINAGE AREA.--0.97 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and culvert control. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 584 cfs Oct. 19 (elevation, 655.49 ft); minimum daily, 0.01 cfs at times.

Period of record: Maximum discharge, 584 cfs Oct. 19, 1971 (elevation, 655.49 ft); no flow at times.

Maximum stage since 1966, about 656.0 ft in August 1966 (discharge not determined), from information by local resident.

REMARKS.--Records fair. Low flow sustained by effluent from commercial establishments above station. One recording rain gage is operated in basin above station, and one is located below station in Seminary South Shopping Center. Records of precipitation and hydrologic data for selected storms are published elsewhere in supplementary basic-data reports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.10	2.1	.10	.05	.04	.10	.02	.02	.02	.79
2	.92	.02	11	.13	.85	.04	.04	.08	.02	.02	.05	.31
3	5.7	.02	.62	1.1	.92	.04	.08	.06	.02	.58	.02	.13
4	.67	.02	.47	.10	.06	.02	.04	.06	.04	.05	.05	1.4
5	.04	.02	8.1	.16	.08	.05	.08	.06	.04	.02	.06	.08
6	.02	.02	2.9	.10	.13	.05	.08	2.6	.02	.02	.19	.08
7	.02	.02	.73	.10	.43	.05	.13	3.8	.02	.02	.02	.06
8	1.2	.04	13	.10	.73	.05	.06	.28	.02	.06	.02	.08
9	.02	.04	29	.10	.92	.06	.04	.19	.02	.02	.02	.16
10	.02	.03	5.3	.13	.79	.05	.02	.13	.02	.16	.02	.16
11	.02	.03	.92	.10	1.5	.05	.04	.08	.79	.02	.04	.08
12	.01	.04	.85	.08	1.1	.05	.02	1.9	.02	.01	.79	.08
13	.02	.04	.74	.16	1.4	.06	.02	.10	.01	.01	.35	.08
14	.02	.04	2.4	.13	.73	.06	.79	.08	.67	.01	.08	.08
15	.02	.04	.28	.13	.13	.06	.62	.08	.14	.01	.02	.43
16	.04	.04	.22	.25	.16	.05	.02	.08	.04	.01	.04	.52
17	.67	6.7	.19	.13	.31	.04	.02	.08	.02	.01	.06	.16
18	3.7	.35	.13	.10	.13	.05	.02	.62	.02	.02	.02	.08
19	43	.19	.13	.08	.10	.06	.02	.08	.02	.02	.02	.08
20	1.9	.16	.13	.08	.08	.79	3.1	.06	.40	.01	.06	.10
21	.25	.13	.13	.08	.06	.22	.92	.05	1.1	.02	.02	2.1
22	.16	4.2	.13	.08	.05	.05	.06	.05	.05	.05	.01	1.2
23	.08	.22	.13	.06	.05	.06	.06	.05	.04	.06	1.7	.19
24	.04	.10	.10	.05	.05	.06	.05	.05	.10	.05	.02	.25
25	.04	.08	.10	.05	.05	.06	.06	.05	.04	.02	.79	.06
26	.52	.06	.08	.19	.04	.99	.10	.04	.04	.01	.08	.06
27	.31	.06	.08	.31	.04	.06	13	.04	.04	.01	.08	.05
28	.04	.06	.08	.05	.05	.06	.35	.05	.04	.02	.08	.08
29	.04	.06	.08	.05	.05	.02	6.1	.05	.70	.01	.04	.19
30	.02	.67	.08	.08	-----	.08	.31	.05	.07	.02	.04	.13
31	.02	-----	.08	.08	-----	.02	-----	.04	-----	.02	.05	-----
TOTAL	59.55	13.52	78.28	6.44	11.09	3.41	26.29	11.04	4.59	1.39	4.86	9.25
MEAN	1.92	.45	2.53	.21	.38	.11	.88	.36	.15	.045	.16	.31
MAX	43	6.7	29	2.1	1.5	.99	13	3.8	1.1	.58	1.7	2.1
MIN	.01	.02	.08	.05	.04	.02	.02	.04	.01	.01	.01	.05
CFSM	1.98	.46	2.61	.22	.39	.11	.91	.37	.15	.05	.16	.32
IN.	2.28	.52	3.00	.25	.43	.13	1.01	.42	.18	.05	.19	.35
AC-FT	118	27	155	13	22	6.8	52	22	9.1	2.8	9.6	18

CAL YR 1971 TOTAL 253.55 MEAN .69 MAX 43 MIN .01 CFSM .71 IN 9.72 AC-FT 503
WTR YR 1972 TOTAL 229.71 MEAN .63 MAX 43 MIN .01 CFSM .65 IN 8.81 AC-FT 456

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-19	2025	655.49	584	12- 9	2150	652.45	204
11-17	1930	652.85	258	4-20	2015	652.79	250
12- 8	1805	652.48	207	4-29	0220	653.33	313

1/This table reproduced from U.S. Geological Survey, 1972, Water Resources Data for Texas, Part 1, Surface Water Records.

TRINITY RIVER BASIN

08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex. 1/

LOCATION.--Lat 32°14'18", long 97°19'11", Tarrant County, on left bank at culvert on downstream side of access road to Interstate Highway 35-W, 0.3 mile north of Seminary Drive in Fort Worth, 1.2 miles upstream from mouth, and 4.3 miles south of Fort Worth City Hall.

DRAINAGE AREA.--1.35 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Oct. 19 (elevation, 628.41 ft); minimum daily, 0.02 cfs Oct. 1, July 15.
Period of record: Maximum discharge, 1,100 cfs Oct. 19, 1971 (elevation, 628.41 ft); minimum daily, 0.01 cfs for many days.
Maximum elevation since 1969, that of Oct. 19, 1971. Flood in May 1969 reached an elevation of 627.2 ft, from floodmarks.

REMARKS.--Records fair. Records include runoff from a shopping center. Low flows sustained by effluents. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.06	.20	3.7	.37	.07	.06	.09	.04	.05	.11	1.5
2	2.2	.06	21	.23	1.4	.14	.06	.09	.11	.05	.22	.58
3	12	.06	.83	1.9	1.6	.20	.12	.06	.09	.97	.13	.15
4	.96	.06	.46	.28	.21	.22	.09	.07	.07	.22	.09	3.4
5	.15	.09	14	.29	.21	.09	.13	.07	.08	.09	.07	.11
6	.15	.06	4.5	.23	.32	.12	.10	3.8	.09	.13	.24	.09
7	.07	.06	1.1	.21	.63	.09	.15	6.0	.08	.06	.09	.07
8	2.1	.07	23	.22	1.0	.09	.08	.26	.12	.04	.11	.08
9	.08	.07	46	.21	1.1	.12	.06	.21	.10	.07	.07	.23
10	.04	.07	6.8	.25	.98	.09	.06	.15	.04	.26	.10	.17
11	.05	.07	1.4	.21	2.8	.11	.06	.18	1.2	.07	.09	.11
12	.08	.07	1.4	.21	2.0	.13	.06	3.5	.13	.18	2.3	.15
13	.06	.07	1.1	.31	1.7	.12	.06	.14	.12	.12	.82	.18
14	.05	.09	5.0	.19	.92	.12	2.6	.11	2.1	.12	.20	.19
15	.04	.09	.88	.18	.21	.09	1.2	.09	.58	.02	.07	.86
16	.07	.09	.56	.27	.39	.09	.07	.09	.17	.03	.10	.87
17	1.5	15	.45	.16	.42	.09	.09	.09	.07	.03	.16	.16
18	7.0	.39	.38	.23	.26	.09	.08	1.1	.06	.05	.09	.08
19	88	.16	.29	.16	.23	.09	.06	.10	.11	.07	.06	.08
20	2.5	.11	.23	.15	.21	1.7	6.3	.07	.60	.06	.09	.07
21	.53	.10	.21	.15	.18	.45	1.4	.07	3.9	.24	.12	3.2
22	.26	7.5	.21	.15	.18	.15	.08	.06	.13	.08	.08	1.8
23	.12	.60	.21	.15	.15	.28	.07	.06	.07	.10	6.0	.32
24	.12	.17	.21	.15	.15	.37	.08	.04	.08	.08	.13	.35
25	.12	.11	.21	.15	.10	.55	.07	.04	.03	.09	1.2	.13
26	1.2	.09	.21	.68	.07	3.3	.11	.07	.07	.06	.09	.13
27	.70	.09	.21	1.1	.07	.12	24	.07	.07	.07	.09	.09
28	.12	.11	.21	.21	.07	.08	.51	.06	.09	.09	.10	.08
29	.09	.12	.21	.22	.07	.07	13	.08	2.2	.07	.07	.20
30	.07	1.6	.32	.21	-----	.11	.15	.06	.10	.07	.07	.14
31	.06	-----	.32	.23	-----	.07	-----	.04	-----	.14	.06	-----
TOTAL	120.51	27.29	132.11	12.99	18.00	9.41	50.96	16.92	12.70	3.78	13.22	15.57
MEAN	3.89	.91	4.26	.42	.62	.30	1.70	.55	.42	.12	.43	.52
MAX	88	15	46	3.7	2.8	3.3	24	6.0	3.9	.97	6.0	3.4
MIN	.02	.06	.20	.15	.07	.07	.06	.04	.03	.02	.06	.07
CFSM	2.88	.67	3.16	.31	.46	.22	1.26	.41	.31	.09	.32	.39
IN.	3.32	.75	3.64	.36	.50	.26	1.40	.47	.35	.10	.36	.43
AC-FT	239	54	262	26	36	19	101	34	25	7.5	26	31

CAL YR 1971	TOTAL	485.89	MEAN	1.33	MAX	88	MIN	.01	CFSM	.99	IN	13.39	AC-FT	964
WTR YR 1972	TOTAL	433.46	MEAN	1.18	MAX	88	MIN	.02	CFSM	.87	IN	11.94	AC-FT	860

PEAK DISCHARGE (BASE, 300 CFS, REVISED)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-19	2025	628.41	1,100	4-27	0600	622.11	327
11-17	1930	622.40	370	4-29	0220	624.04	616
12- 8	1805	622.25	348	8-23	1800	622.86	439
4-20	2015	622.52	388				

1/This table reproduced from U.S. Geological Survey, 1972, Water Resources Data for Texas, Part 1, Surface Water Records.

TRINITY RIVER BASIN

08048600 Dry Branch at Fain Street, Fort Worth, Tex. 1/

LOCATION.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft upstream from culvert on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles upstream from mouth, and 2.9 miles northeast of Tarrant County Courthouse.

DRAINAGE AREA.--2.15 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 352 cfs Oct. 19 (gage height, 5.10 ft); minimum daily, 0.02 cfs June 27.

Period of record: Maximum discharge, 352 cfs Oct. 19, 1971 (gage height, 5.10 ft); minimum daily, 0.02 cfs June 25, 1971, and June 27, 1972.

Maximum stage since April 1964, 9.0 ft in April 1966 at upstream side of Fain Street culvert, from information by local resident (discharge not determined).

REMARKS.--Records good above 1.0 cfs and fair below. Low flow sustained by effluent from commercial establishments and industry above station. Two recording rain gages are operated in basin above station.

REVISIONS.--WRD Texas 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.13	.61	4.5	.13	.05	.13	.13	.08	.03	.05	3.2
2	.38	.13	35	.38	.13	.05	.13	.05	.22	.05	.05	.38
3	25	.05	3.0	1.1	.13	.05	.08	.08	.22	.38	.08	.05
4	1.9	.05	1.6	.22	.13	.05	.13	.08	.38	.05	.08	6.6
5	.22	.05	21	.22	.22	.05	.13	.08	.22	.05	.13	.38
6	.08	.08	7.3	.22	.13	.05	.08	5.0	.22	.05	.13	.13
7	.22	.08	2.6	.38	.13	.05	.08	1.6	.22	.08	.05	.05
8	2.6	.08	26	.22	.13	.05	.13	.38	.38	.08	.05	.05
9	.22	.08	75	.22	.13	.05	.13	.22	.22	.08	.05	.05
10	.05	.08	20	.22	.13	.05	.13	.13	.13	.08	.05	.08
11	.05	.08	1.9	.22	1.4	.05	.13	.08	.61	.08	.05	.08
12	.05	.08	1.4	.22	.38	.05	.13	6.6	.61	.05	1.1	.08
13	.05	.08	1.1	.22	.08	.05	.13	.22	.22	2.4	1.7	.08
14	.05	.08	6.0	.38	.08	.03	.22	.61	6.6	.38	.61	.08
15	.05	.08	2.6	.38	.08	.03	1.1	.61	1.4	.08	.08	.08
16	.05	.08	1.4	.38	.08	.03	.13	.13	.38	.03	.08	.38
17	6.0	25	1.1	.22	.08	.03	.08	.08	.22	.03	.61	.08
18	16	1.0	.61	.22	.08	.03	.08	.08	.22	.05	.13	.08
19	62	.61	.61	.22	.08	.03	.08	.08	.13	.05	.13	.08
20	17	.22	.38	.22	.08	.38	1.3	.08	.05	.05	.22	.08
21	.61	.22	.22	.38	.08	1.1	1.6	.08	.03	.05	.22	1.9
22	.08	11	.22	.38	.08	.08	.22	.08	.03	.38	.22	2.8
23	.08	2.6	.22	.38	.08	.13	.13	.08	.03	.22	1.1	.22
24	.13	.38	.22	.38	.05	.08	.05	.05	.03	.13	.38	.13
25	.08	.22	.22	.22	.05	.08	.05	.03	.03	.05	.38	.08
26	.61	.13	.22	.38	.05	.13	.13	.03	.03	.03	.13	1.1
27	1.7	.13	.38	1.1	.03	.13	17	.03	.02	.03	.13	1.4
28	.38	.13	.13	.13	.03	.08	.38	.03	.03	.03	.13	.13
29	.22	.22	.13	.13	.05	.08	9.6	.03	.03	.03	.05	.61
30	.22	1.6	.22	.13	-----	.13	.22	.03	.03	.05	.05	.22
31	.13	-----	.22	.13	-----	.13	-----	.05	-----	.05	.05	-----
TOTAL	136.29	44.75	211.61	14.10	4.31	3.36	33.91	16.84	13.02	5.18	8.27	20.66
MEAN	4.40	1.49	6.83	.45	.15	.11	1.13	.54	.43	.17	.27	.69
MAX	62	25	75	4.5	1.4	1.1	17	6.6	6.6	2.4	1.7	6.6
MIN	.05	.05	.13	.13	.03	.03	.05	.03	.02	.03	.05	.05
CFSM	2.05	.69	3.18	.21	.07	.05	.53	.25	.20	.08	.13	.32
IN.	2.36	.77	3.66	.24	.07	.06	.59	.29	.23	.09	.14	.36
AC-FT	270	89	420	28	8.6	6.7	67	33	26	10	16	41
(††)	7.65	2.84	6.93	.59	.24	.20	2.96	1.41	1.27	.62	1.04	2.26
CAL YR 1971 TOTAL	594.28											
MEAN	1.63											
MAX	75											
MIN	.02											
CFSM	.76											
IN	10.28											
AC-FT	1180											
WTR YR 1972 TOTAL	512.30											
MEAN	1.40											
MAX	75											
MIN	.02											
CFSM	.65											
IN	8.86											
AC-FT	1020											
††	34.24											
††	28.01											

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10- 3	1300	2.90	115	12- 8	1915	3.13	136
10-18	1715	3.00	124	12- 9	0930	4.52	282
10-19	2130	5.10	352	4-27	0645	3.12	135
11-17	1900	3.47	169	4-29	0345	2.78	104
12- 2	1445	3.30	152				

†† Weighted-mean rainfall, in inches, based on two rain gages.

1/This table reproduced from U.S. Geological Survey, 1972, Water Resources Data for Texas, Part 1, Surface Water Records.

TRINITY RIVER BASIN

08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex. 1/

LOCATION.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles northeast of county courthouse, and approximately 4.3 miles upstream from Big Fossil Creek.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,580 cfs Dec. 9 (gage height, 8.90 ft); no flow at times.

Period of record: Maximum discharge, 1,580 cfs Dec. 9, 1971 (gage height, 8.90 ft); no flow at times each year.

Maximum stage since 1955, 10.5 ft (at Alta Vista Road) in September 1962, from information by local resident (discharge not determined). Flood of Mar. 20, 1968, reached a stage of 8.7 ft (discharge, 1,600 cfs), from floodmarks at upstream side of Alta Vista Road Bridge.

REMARKS.--Records good. Flow slightly regulated by several small farm ponds located on tributaries above station. Low flow sustained at times by effluent from industrial park 2.6 miles upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.72	1.8	6.1	.99	.57	.26	.44	0	0	0	.10
2	.05	.64	127	3.9	.99	.50	.26	.26	0	0	0	.02
3	29	.57	22	3.4	.90	.50	.26	.13	0	.01	0	.01
4	8.7	.50	6.1	3.1	.81	.50	.26	.10	0	0	0	1.5
5	1.5	.50	114	2.6	.72	.50	.26	.10	0	0	0	.72
6	.64	.50	35	2.4	.72	.50	.26	.81	0	0	0	.21
7	.38	.50	20	2.4	.72	.50	.26	.64	0	0	0	.10
8	1.1	.50	215	2.4	.72	.50	.26	.32	0	0	0	.05
9	.64	.50	550	2.2	.64	.50	.26	.26	0	0	0	.01
10	.38	.50	250	2.0	.64	.50	.26	.13	0	0	0	0
11	.21	.50	14	2.0	.81	.50	.26	.13	0	0	0	0
12	.17	.38	9.2	1.6	1.1	.50	.26	2.2	0	0	.02	0
13	.17	.38	6.9	1.6	.81	.50	.21	.72	0	1.5	.13	0
14	.13	.38	23	1.5	.72	.50	.21	.44	.64	.57	.90	0
15	.13	.38	22	1.3	.72	.44	.57	.21	.50	.02	.07	0
16	.10	.38	7.7	1.3	.64	.44	.44	.13	.99	0	.01	0
17	1.3	29	5.7	1.2	.64	.44	.21	.13	.17	0	0	0
18	5.4	12	4.8	1.2	.64	.44	.13	.10	.05	0	0	0
19	189	2.2	4.5	1.2	.64	.44	.13	.10	.02	0	0	0
20	78	1.3	3.9	1.2	.57	.44	.21	.07	0	0	0	0
21	4.8	1.2	3.6	1.2	.57	.50	.57	.05	0	0	0	.01
22	2.6	10	3.6	1.1	.57	.50	.38	.03	0	0	0	.10
23	1.8	13	3.6	1.1	.57	.44	.21	.02	0	0	.10	.21
24	1.3	3.6	3.6	1.1	.57	.44	.13	.01	0	0	.02	.10
25	1.2	2.6	3.6	1.1	.57	.44	.10	.07	0	0	0	.10
26	.99	1.8	3.4	.99	.57	.44	.07	.07	0	0	.01	.10
27	2.9	1.6	3.1	1.2	.57	.44	11	.02	0	0	0	.57
28	1.5	1.6	2.9	1.2	.57	.44	1.3	.01	0	0	0	.13
29	.99	1.3	2.8	1.2	.57	.32	3.1	0	0	0	0	.05
30	.90	1.6	2.6	1.1	-----	.26	.81	0	0	0	0	.02
31	.72	-----	2.4	.99	-----	.26	-----	0	-----	0	0	-----
TOTAL	336.71	90.63	1,477.8	56.88	20.27	14.19	22.90	7.70	2.37	2.10	1.26	4.11
MEAN	10.9	3.02	47.7	1.83	.70	.46	.76	.25	.079	.068	.041	.14
MAX	189	29	550	6.1	1.1	.57	11	2.2	.99	1.5	.90	1.5
MIN	.01	.38	1.8	.99	.57	.26	.07	0	0	0	0	0
CFSM	.89	.25	3.88	.15	.06	.04	.06	.02	.006	.006	.003	.01
IN.	1.02	.27	4.47	.17	.06	.04	.07	.02	.007	.006	.003	.01
AC-FT	668	180	2,930	113	40	28	45	15	4.7	4.2	2.5	8.2
(††)	6.46	2.32	6.53	.52	.25	.06	2.46	1.13	1.10	1.51	1.68	2.41

CAL YR 1971	TOTAL	2,188.39	MEAN	6.00	MAX	550	MIN	0	CFSM	.49	IN	6.62	AC-FT	4,340	††	31.98
WTR YR 1972	TOTAL	2,036.92	MEAN	5.57	MAX	550	MIN	0	CFSM	.45	IN	6.16	AC-FT	4,040	††	26.43

PEAK DISCHARGE (BASE, 290 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-19	2200	8.61	1,520	12-8	1945	7.45	1,250
12- 2	1600	5.42	514	12-9	1100	8.90	1,580
12- 5	1000	4.68	326	12-9	2400	7.95	1,380

†† Weighted-mean rainfall, in inches, based on three rain gages.

1/This table reproduced from U.S. Geological Survey, 1972, Water Resources Data for Texas, Part 1, Surface Water Records.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS, 1972 WATER YEAR

Station	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
08048550	Dry Branch at Blandin Street, Fort Worth, Tex. <u>1/</u>	Lat 32°47'19", long 97°18'22", Tarrant County, at culvert on Blandin Street in north Fort Worth and 2.82 miles (4.5 kilometers) upstream from mouth.	1.08	1969-72	10-19-71	588.48	422
08048820	Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. <u>1/</u>	Lat 32°50'22", Long 97°19'22", Tarrant County, at culvert on south access road to Interstate Highway 820, 5.7 miles (9.2 kilometers) north of courthouse, Fort Worth, and 7.55 miles (12.2 kilometers) upstream from mouth.	5.64	1969-72	12- 9-71	613.89	632

1/ Equipped with stage recorder.

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y

OBSERVED DAILY RAINFALL AMOUNTS IN INCHES PERIOD : 1972 WATER YEAR

G A G E N U M B E R

DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF
OCT										
2	0.16	0.44	0.33	0.17	0.38	0.18	0.00	0.06	0.05	0.13
3	1.40	1.33	1.11	0.86	1.25	2.12	1.89	2.60	1.70	1.92
4	0.09	0.09	0.07	0.08	0.10	0.08	0.10	0.08	0.05	0.05
8	0.35	0.34	0.32	0.50	0.30	0.31	0.28	0.26	0.31	0.31
17	0.31	0.24	0.31	0.20	0.26	0.42	0.40	0.30	0.48	0.43
18	1.06	0.87	0.71	0.86	0.61	0.76	1.10	0.49	0.62	0.64
19	5.38	4.58	4.90	3.56	5.17	3.22	3.75	2.22	2.04	3.27
26	0.25	0.28	0.20	0.20	0.25	0.35	0.25	0.30	0.30	0.25
27	0.05	0.03	0.00	0.02	0.03	0.04	0.05	0.08	0.05	0.05
MTOT	9.05	8.20	7.95	6.45	8.35	7.48	7.82	6.39	5.60	7.05
NOV										
17	1.85	1.59	1.02	1.41	1.15	1.78	1.67	1.02	0.98	1.81
22	0.80	0.77	0.73	0.69	0.76	0.94	0.85	0.80	0.80	0.79
30	0.25	0.25	0.22	0.09	0.25	0.20	0.25	0.15	0.25	0.18
MTOT	2.90	2.61	1.97	2.19	2.16	2.92	2.77	1.97	2.03	2.78
DEC										
2	1.42	1.45	1.33	0.70	1.41	1.60	1.58	1.40	1.39	1.62
5	0.95	0.95	0.95	0.44	1.00	0.94	0.95	0.85	0.86	0.89
6	0.39	0.40	0.34	0.30	0.34	0.30	0.28	0.30	0.29	0.30
8	1.00	1.15	1.09	1.20	1.25	1.07	1.12	1.24	1.23	1.05
9	2.26	2.03	1.59	2.00	1.95	2.38	2.68	2.45	2.36	2.14
10	0.00	0.00	0.00	0.00	0.07	0.03	0.03	0.06	0.05	0.05
14	0.32	0.36	0.38	0.15	0.30	0.45	0.38	0.41	0.40	0.30
31	0.10	0.11	0.00	0.15	0.07	0.07	0.00	0.00	0.00	0.00
MTOT	6.44	6.45	5.68	4.94	6.39	6.84	7.02	6.71	6.58	6.35
CTOT	37.25	35.78	32.60	33.20	35.86	34.82	33.69	30.86	32.01	32.92
MTOT=MONTHLY TOTALS										
CTOT=CALENDAR YEAR TOTALS										

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

F O R T N O R T H U R B A N H Y D R O L O G Y S T U D Y													
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES										P E R I O D : 1972 W A T E R Y E A R			
G A G F N U M B E R													
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF			
JAN													
1	0.50	0.43	0.44	0.53	0.39	0.36	0.35	0.25	0.26	0.35			
3	0.22	0.22	0.22	0.30	0.21	0.03	0.08	0.06	0.05	0.04			
4	0.04	0.05	0.00	0.04	0.05	0.05	0.07	0.05	0.05	0.03			
26	0.09	0.08	0.04	0.09	0.07	0.05	0.03	0.10	0.04	0.03			
27	0.10	0.09	0.16	0.14	0.07	0.09	0.07	0.05	0.07	0.10			
TOT	0.99	0.87	0.90	1.10	0.79	0.58	0.60	0.51	0.47	0.55			
FEB													
1	0.07	0.07	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.04			
11	0.21	0.21	0.18	0.26	0.18	0.21	0.20	0.24	0.19	0.19			
TOT	0.28	0.28	0.21	0.30	0.22	0.25	0.24	0.29	0.24	0.23			
MAR													
20	0.34	0.37	0.23	0.27	0.24	0.15	0.24	0.07	0.07	0.04			
26	0.24	0.33	0.34	0.30	0.30	0.00	0.00	0.00	0.00	0.00			
TOT	0.58	0.70	0.57	0.57	0.54	0.15	0.24	0.07	0.07	0.04			
MONTHLY TOTALS													

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y

OBSERVED DAILY RAINFALL AMOUNTS IN INCHES PERIOD : 1972 WATER YEAR

G A G E N U M B E R

DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DR	2-DR	1-LF	2-LF	3-LF
APR										
14	0.40	0.35	0.34	0.24	0.41	0.06	0.12	0.10	0.15	0.10
15	0.24	0.26	0.20	0.18	0.15	0.24	0.03	0.33	0.14	0.14
20	1.05	1.34	0.97	0.53	0.66	0.35	0.17	0.11	0.15	0.22
21	0.22	0.22	0.21	0.15	0.20	0.10	0.20	0.08	0.09	0.10
27	2.89	2.72	3.23	2.30	2.38	1.57	1.70	1.53	1.45	1.53
29	0.49	0.78	0.63	0.97	1.20	0.81	0.56	0.28	0.36	0.45
MTOT	5.33	5.67	5.58	4.37	5.00	3.13	2.78	2.43	2.38	2.54
MAY										
2	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.68	0.63	0.57	0.59	0.61	0.57	0.60	0.45	0.44	0.44
7	0.52	0.68	0.86	0.62	0.73	0.09	0.12	0.09	0.16	0.14
12	0.50	0.38	0.40	0.41	0.39	0.73	0.55	0.46	0.58	0.50
13	0.00	0.00	0.00	0.00	0.00	0.14	0.02	0.05	0.05	0.06
18	0.19	0.14	0.25	0.15	0.16	0.00	0.00	0.00	0.00	0.00
29	0.03	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
MTOT	1.92	1.89	2.18	1.78	1.90	1.53	1.29	1.05	1.23	1.14
JUN										
8	0.00	0.00	0.00	0.00	0.00	0.20	0.06	0.20	0.16	0.04
11	0.00	0.00	0.00	0.34	0.16	0.32	0.11	0.83	0.24	0.12
12	0.00	0.00	0.00	0.00	0.00	0.06	0.09	0.00	0.00	0.12
14	0.33	0.27	0.28	0.31	0.37	0.63	0.81	0.49	0.50	0.51
15	0.25	0.17	0.26	0.10	0.13	0.07	0.19	0.03	0.04	0.03
20	0.00	0.04	0.07	0.45	0.54	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.22	0.05	0.03	0.00	0.00	0.00	0.00	0.00
29	0.03	0.44	0.66	0.43	0.35	0.00	0.00	0.00	0.00	0.00
MTOT	0.61	0.92	1.51	1.68	1.58	1.28	1.26	1.55	0.94	0.82
MTOT=MONTHLY TOTALS										

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y													
O B S E R V E D D A I L Y R A I N F A L L A M O U N T S I N I N C H E S													
P E R I O D : 1 9 7 2 W A T E R Y E A R													
G A G E N U M B E R													
D A T E	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF			
JUL													
3	0.18	0.10	0.08	0.30	0.21	0.18	0.03	0.52	0.25	0.37			
4	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.30	0.00	0.00			
8	0.06	0.06	0.00	0.06	0.04	0.03	0.00	0.11	0.06	0.04			
12	0.62	0.58	0.00	0.07	0.04	0.10	0.00	1.50	0.80	0.40			
13	0.00	0.00	0.00	0.00	0.00	0.54	0.22	0.13	0.35	0.03			
21	0.00	0.08	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00			
22	0.24	0.40	0.00	0.00	0.06	0.04	0.07	0.07	0.04	0.00			
M T O T	1.10	1.22	0.14	0.43	0.35	0.89	0.36	2.33	1.50	0.84			
AUG													
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.00			
11	0.05	0.12	0.00	0.05	0.04	0.04	0.00	0.48	0.11	0.05			
12	0.05	0.15	0.25	0.26	0.54	0.21	0.25	0.08	0.23	0.30			
13	0.16	0.14	0.13	0.19	0.11	0.65	0.10	0.32	0.65	0.95			
17	0.30	0.16	0.00	0.06	0.03	0.16	0.14	0.05	0.03	0.00			
23	0.03	0.43	1.23	0.37	0.90	0.20	0.25	0.48	0.23	0.12			
25	1.66	0.62	0.16	0.40	0.10	0.08	0.00	0.24	0.15	0.11			
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.07	0.00			
M T O T	2.25	1.62	1.77	1.33	1.72	1.34	0.74	1.96	1.53	1.53			

M T O T = M O N T H L Y T O T A L S

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y													
OBSERVED DAILY RAINFALL AMOUNTS IN INCHES													
PERIOD : 1972 WATER YEAR													
G A G E N U M B E R													
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF			
SEPT													
1	0.05	0.09	0.13	0.40	0.38	0.39	0.31	0.31	0.24	0.24			
4	0.10	0.10	0.17	0.35	0.38	0.75	0.70	0.57	0.66	0.69			
R	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.06	0.05			
15	0.00	0.00	0.40	0.22	0.20	0.00	0.00	0.00	0.00	0.00			
16	0.15	0.17	0.20	0.26	0.19	0.06	0.07	0.10	0.04	0.00			
21	0.64	1.03	0.81	0.90	0.58	0.34	0.42	0.52	0.45	0.34			
22	0.32	0.32	0.16	0.50	0.30	0.27	0.34	0.49	0.30	0.24			
23	0.10	0.08	0.16	0.10	0.10	0.00	0.00	0.25	0.15	0.10			
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00			
26	0.00	0.00	0.00	0.00	0.00	0.33	0.27	0.20	0.75	0.30			
29	0.10	0.04	0.00	0.00	0.00	0.20	0.07	0.06	0.08	0.06			
MTOT	1.50	1.43	2.04	2.73	2.13	2.34	2.18	2.55	2.84	2.04			
WTOT	32.95	32.26	30.54	27.87	31.13	28.73	27.30	27.81	25.41	25.91			
MTOT=MONTHLY TOTALS													
WTOT=WATER YEAR TOTAL													

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

TABLE									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF OCT. 19-20, 1971									
DATE & TIME	G A G E N U B E H				PRECIP. IN.	DISCHARGE FT ³ /S			
	1-SC	2-SC	3-SC						
OCT. 19									
0000	0.0	0.0	0.0		0.0	28.0	0.0	0.0003	0.0003
0015	0.08	0.04	0.0		0.0	26.0	0.05	0.0012	0.0012
0045	0.08	0.04	0.03		0.03	24.0	0.05	0.0020	0.0020
0100	0.08	0.21	0.03		0.13	22.0	0.13	0.0024	0.0024
0115	0.08	0.22	0.13		0.13	50.0	0.16	0.0035	0.0035
0130	0.08	0.22	0.51		0.51	60.0	0.23	0.0049	0.0049
0145	0.08	0.29	0.54		0.54	97.0	0.27	0.0070	0.0070
0200	0.08	0.29	0.57		0.57	116.0	0.27	0.0108	0.0108
0230	0.09	0.29	0.57		0.57	136.0	0.28	0.0168	0.0168
0300	0.13	0.32	0.57		0.32	106.0	0.30	0.0215	0.0215
0330	0.14	0.33	0.59		0.59	80.0	0.32	0.0250	0.0250
0400	0.14	0.33	0.63		0.63	78.0	0.32	0.0276	0.0276
0415	0.14	0.33	0.63		0.63	78.0	0.32	0.0293	0.0293
0430	0.17	0.36	0.64		0.64	71.0	0.35	0.0309	0.0309
0445	0.22	0.41	0.65		0.65	66.0	0.39	0.0323	0.0323
0500	0.27	0.44	0.65		0.65	64.0	0.42	0.0337	0.0337
0515	0.46	0.48	0.70		0.70	58.0	0.52	0.0350	0.0350
0530	0.70	0.77	0.73		0.73	57.0	0.74	0.0363	0.0363
0545	1.10	1.16	0.78		0.78	59.0	1.07	0.0376	0.0376
0600	1.14	1.19	1.13		1.13	95.0	1.16	0.0396	0.0396
0615	1.17	1.22	1.17		1.17	141.0	1.19	0.0427	0.0427
0630	1.22	1.24	1.20		1.20	237.0	1.23	0.0480	0.0480
0645	1.27	1.28	1.23		1.23	411.0	1.27	0.0570	0.0570
0700	1.29	1.31	1.28		1.28	586.0	1.30	0.0699	0.0699
0715	1.33	1.34	1.33		1.33	680.0	1.33	0.0849	0.0849
0730	1.37	1.38	1.37		1.37	796.0	1.37	0.1024	0.1024
0745	1.41	1.43	1.41		1.41	824.0	1.42	0.1205	0.1205
0800	1.44	1.46	1.45		1.45	778.0	1.45	0.1462	0.1462
0830	1.53	1.56	1.54		1.54	662.0	1.55	0.1754	0.1754
0900	1.55	1.59	1.63		1.63	562.0	1.58	0.2125	0.2125
1000	1.58	1.61	1.64		1.64	399.0	1.61	0.2476	0.2476
1100	1.58	1.61	1.64		1.64	250.0	1.61	0.2646	0.2646
1200	1.58	1.61	1.64		1.64	161.0	1.61	0.2909	0.2909
1300	1.58	1.61	1.64		1.64	95.0	1.61	0.3076	0.3076
1400	1.58	1.61	1.64		1.64	59.0	1.61	0.3140	0.3140
1500	1.58	1.61	1.64		1.64	36.0	1.61	0.3220	0.3220
1600	1.58	1.61	1.64		1.64	33.0	1.61	0.3230	0.3230
1700	1.60	1.63	1.64		1.64	31.0	1.62	0.3237	0.3237
1800	1.75	1.69	1.64		1.64	29.0	1.70	0.3244	0.3244

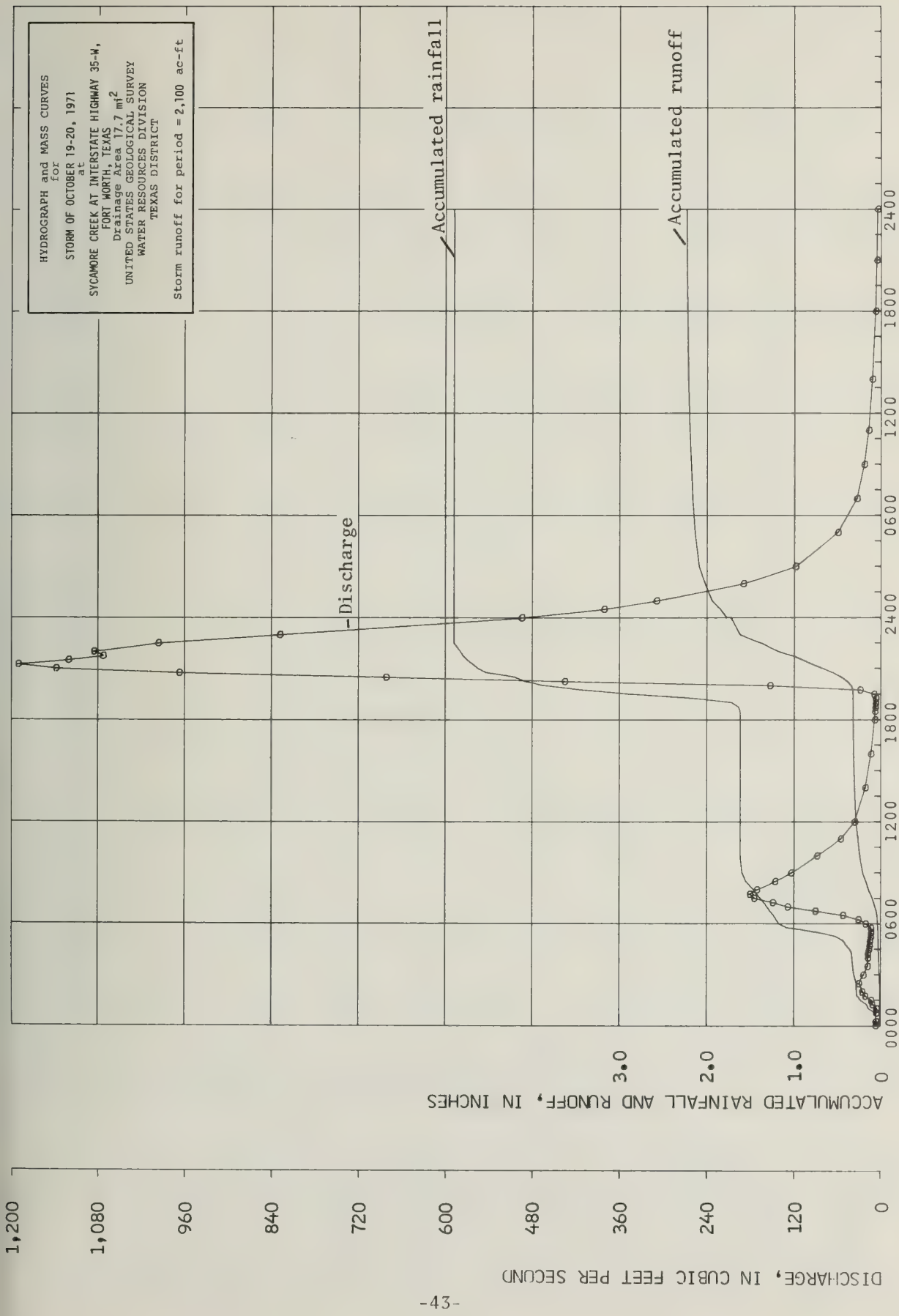
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048520									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX.									
OCT. 19-20, 1971									
DATE & TIME	G A G F				PRECIP.		DISCHARGE		
	1-SC	2-SC	3-SC	3-SC	IN.	FT ³ /S	IN.	ACCUM.	RUNOFF
OCT. 19									
1915	2.64	2.01	1.69		2.16	28.0			0.3250
1930	3.52	2.81	2.01		2.89	41.0			0.3259
1945	4.23	3.31	2.38		3.44	129.0			0.3287
2000	4.54	3.81	2.86		3.87	698.0			0.3441
2015	4.57	3.91	3.62		4.07	1990.0			0.3879
2030	4.57	3.91	4.22		4.19	3120.0			0.4566
2045	5.05	4.26	4.22		4.51	4430.0			0.5541
2100	5.10	4.34	4.43		4.61	5210.0			0.6688
2115	5.14	4.38	4.58		4.67	5450.0			0.7887
2130	5.19	4.43	4.72		4.74	5130.0			0.9016
2145	5.25	4.47	4.76		4.78	4910.0			1.0097
2200	5.27	4.51	4.80		4.82	4970.0			1.1738
2230	5.38	4.58	4.85		4.90	4560.0			1.3745
2300	5.38	4.58	4.90		4.90	3790.0			1.6248
2400	5.38	4.58	4.90		4.90	2260.0			1.7243
OCT. 20									
0000	5.38	4.58	4.90		4.90	2260.0			1.7740
0030	5.38	4.58	4.90		4.90	1740.0			1.8506
0100	5.38	4.58	4.90		4.90	1410.0			1.9437
0200	5.38	4.58	4.90		4.90	864.0			2.0198
0300	5.38	4.58	4.90		4.90	535.0			2.0905
0500	5.38	4.58	4.90		4.90	269.0			2.1378
0700	5.38	4.58	4.90		4.90	148.0			2.1639
0900	5.38	4.58	4.90		4.90	102.0			2.1819
1100	5.38	4.58	4.90		4.90	75.0			2.1984
1400	5.38	4.58	4.90		4.90	52.0			2.2144
1800	5.38	4.58	4.90		4.90	32.0			2.2243
2100	5.38	4.58	4.90		4.90	24.0			2.2305
2400	5.38	4.58	4.90		4.90	20.0			2.2332

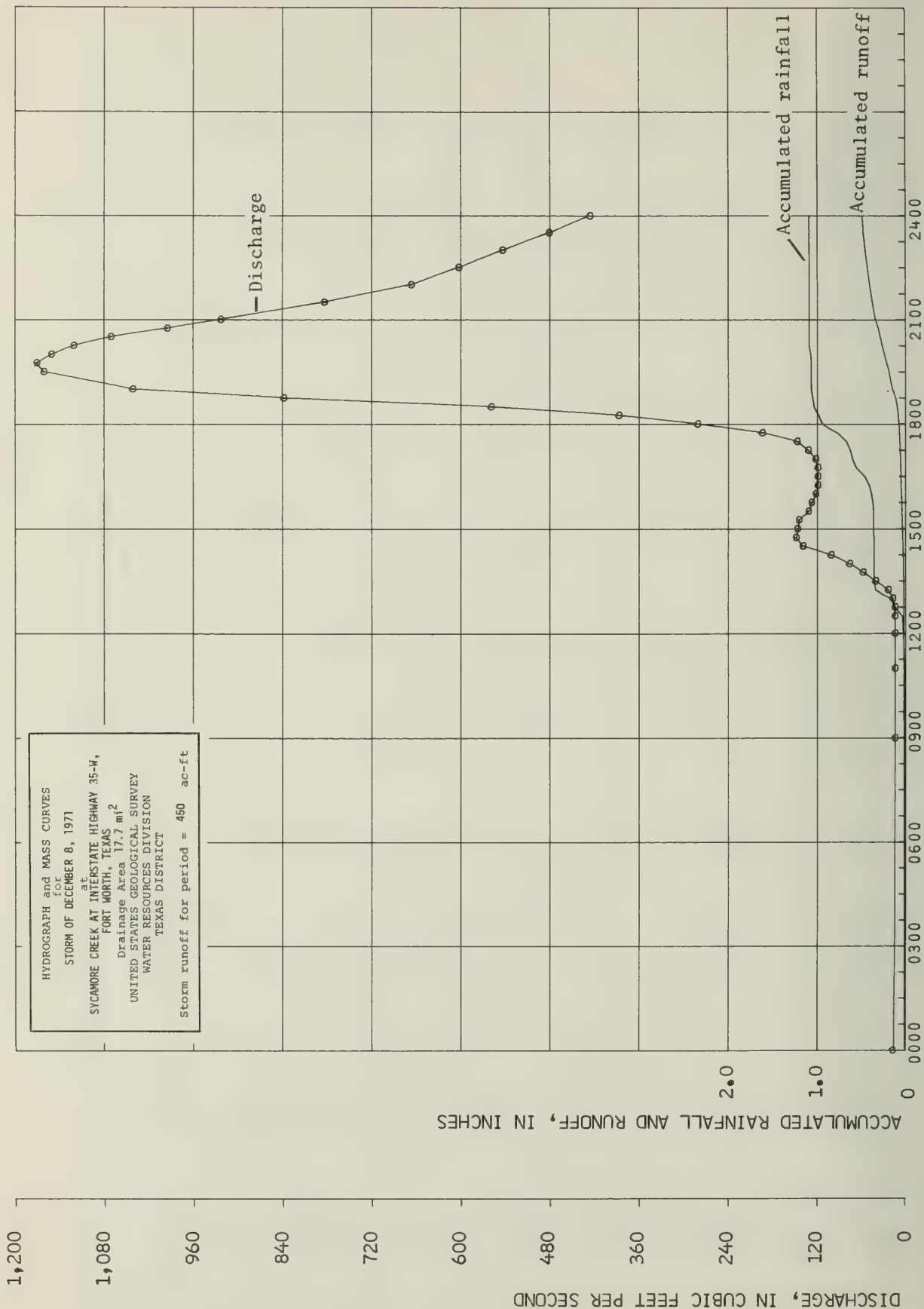
STA. NO. 08048520		TABLE ----- STORM RAINFALL AND RUNOFF RECORD										1972 WATER YEAR	
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX.		STORM OF DECEMBER 8, 1971										DISCHARGE	
DATE & TIME		G A G E N U M B E R										IN	
		1-SC	2-SC	3-SC								FT ³ /S	IN.
DEC.	H												
0900		0.0	0.0	0.0								17.0	0.0067
0900		0.0	0.0	0.0								14.0	0.0135
1100		0.02	0.02	0.0								14.0	0.0154
1200		0.05	0.04	0.03								14.0	0.0163
1230		0.05	0.04	0.03								14.0	0.0168
1245		0.07	0.15	0.13								14.0	0.0171
1300		0.07	0.25	0.18								17.0	0.0174
1315		0.23	0.42	0.37								23.0	0.0179
1330		0.24	0.42	0.40								40.0	0.0188
1345		0.24	0.43	0.41								57.0	0.0201
1400		0.24	0.43	0.41								75.0	0.0217
1415		0.24	0.43	0.41								100.0	0.0239
1430		0.24	0.43	0.41								138.0	0.0270
1445		0.24	0.43	0.41								148.0	0.0302
1500		0.24	0.43	0.43								146.0	0.0334
1515		0.24	0.43	0.43								144.0	0.0366
1530		0.24	0.43	0.43								131.0	0.0395
1545		0.24	0.44	0.44								127.0	0.0423
1600		0.25	0.46	0.45								121.0	0.0449
1615		0.28	0.48	0.48								118.0	0.0475
1630		0.33	0.53	0.52								118.0	0.0501
1645		0.47	0.63	0.56								118.0	0.0527
1700		0.54	0.65	0.60								121.0	0.0554
1715		0.55	0.68	0.63								131.0	0.0583
1730		0.59	0.73	0.66								146.0	0.0615
1745		0.70	0.81	0.81								193.0	0.0657
1800		0.87	1.01	0.92								280.0	0.0719
1815		0.89	1.06	0.96								386.0	0.0804
1830		0.95	1.11	1.00								558.0	0.0927
1845		0.98	1.11	1.03								837.0	0.1111
1900		0.99	1.11	1.09								1040.0	0.1454
1930		0.99	1.11	1.09								1160.0	0.1837
1945		0.99	1.11	1.09								1170.0	0.2095
2000		0.99	1.12	1.09								1150.0	0.2348
2015		1.00	1.15	1.09								1120.0	0.2595
2030		1.00	1.15	1.09								1070.0	0.2830
2045		1.00	1.15	1.09								994.0	0.3049
2100		1.00	1.15	1.09								922.0	0.3353
2130		1.00	1.15	1.09								783.0	0.3698

TABLE 1 STATION NO. 08048520 SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
STORM OF DEC. 9-10, 1971									
DATE & TIME	1-SC	2-SC	3-SC	G A G F	N U M B E R	R	ACCUM. WEIGHTED PRECIP.	DISCHARGE IN	ACCUM. RUNOFF
DEC. 9							IN.	FT ³ /S	IN.
0000	0.0	0.0	0.0				0.0	425.0	0.0187
0100	0.0	0.0	0.0				0.0	323.0	0.0471
0200	0.0	0.0	0.0				0.0	232.0	0.0676
0300	0.0	0.0	0.0				0.0	171.0	0.0826
0400	0.0	0.0	0.0				0.0	141.0	0.0950
0500	0.02	0.02	0.02				0.02	118.0	0.1054
0600	0.05	0.03	0.02				0.03	104.0	0.1112
0615	0.06	0.04	0.10				0.06	102.0	0.1134
0630	0.07	0.14	0.20				0.14	97.0	0.1155
0645	0.17	0.26	0.26				0.24	106.0	0.1170
0700	0.33	0.30	0.31				0.31	112.0	0.1203
0715	0.35	0.37	0.36				0.36	123.0	0.1230
0730	0.40	0.43	0.41				0.42	143.0	0.1262
0745	0.45	0.45	0.44				0.45	186.0	0.1303
0800	0.56	0.46	0.46				0.49	297.0	0.1368
0815	0.62	0.48	0.49				0.53	415.0	0.1460
0830	0.76	0.65	0.55				0.67	570.0	0.1585
0845	0.86	0.83	0.65				0.81	824.0	0.1766
0900	0.45	0.87	0.70				0.86	1030.0	0.1993
0915	1.00	0.91	0.74				0.91	1120.0	0.2240
0930	1.06	0.98	0.78				0.97	1160.0	0.2495
0945	1.10	1.02	0.82				1.01	1170.0	0.2752
1000	1.11	1.03	0.85				1.02	1160.0	0.3135
1030	1.19	1.08	0.87				1.08	1140.0	0.3637
1100	1.20	1.09	0.88				1.09	1129.0	0.4130
1130	1.20	1.10	0.89				1.09	1090.0	0.4610
1200	1.20	1.10	0.89				1.09	1060.0	0.5077
1230	1.20	1.11	0.91				1.10	990.0	0.5513
1300	1.25	1.17	0.93				1.15	927.0	0.5921
1330	1.28	1.19	0.96				1.18	873.0	0.6305
1400	1.32	1.23	0.98				1.21	778.0	0.6819
1500	1.32	1.23	0.98				1.21	644.0	0.7386
1600	1.32	1.23	0.98				1.21	506.0	0.7831
1700	1.34	1.24	0.99				1.24	342.0	0.8476
1800	1.34	1.26	0.99				1.24	305.0	0.8445
1900	1.34	1.26	1.00				1.24	242.0	0.8631
1945	1.34	1.26	1.03				1.24	212.0	0.8725
2000	1.37	1.30	1.03				1.27	191.0	0.8767
2015	1.42	1.33	1.06				1.31	191.0	0.8809

STATION NO. 04044520									
SYCAMORE CREEK AT INTERSTATE HWY 35-W. FORT WORTH, TEX.									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
STORM OF DEC. 9-10, 1971									
PRECIP. IN. ACCUM. DISCHARGE IN. FT ³ /S. IN. RUNOFF ACCUM.									
DATE & TIME									
1-SC 2-SC 3-SC									
PRECIP. IN. FT ³ /S. IN. RUNOFF ACCUM.									
DEC. 9									
2030	1.46	1.35	1.10					1.34	1.46.0
2045	1.47	1.36	1.11					1.35	1.44.0
2100	1.50	1.36	1.12					1.36	1.49.0
2115	1.53	1.56	1.15					1.47	1.76.0
2130	1.87	1.75	1.32					1.71	1.82.0
2145	2.03	1.78	1.35					1.78	2.22.0
2200	2.05	1.84	1.37					1.82	2.88.0
2230	2.08	1.86	1.43					1.85	535.0
2245	2.10	1.88	1.43					1.87	566.0
2300	2.11	1.90	1.44					1.88	546.0
2330	2.14	1.95	1.44					1.94	466.0
2400	2.26	2.03	1.59					2.02	425.0
DEC. 10									
0000	2.26	2.03	1.59					2.02	425.0
0030	2.26	2.03	1.59					2.02	439.0
0045	2.26	2.03	1.59					2.02	442.0
0100	2.26	2.03	1.59					2.02	439.0
0200	2.26	2.03	1.59					2.02	432.0
0400	2.26	2.03	1.59					2.02	422.0
0600	2.26	2.03	1.59					2.02	302.0
0630	2.26	2.03	1.59					2.02	264.0
0700	2.26	2.03	1.59					2.02	1.2272
0800	2.26	2.03	1.59					2.02	232.0
0900	2.26	2.03	1.59					2.02	140.0
1000	2.26	2.03	1.59					2.02	148.0
1200	2.26	2.03	1.59					2.02	126.0
1400	2.26	2.03	1.59					2.02	101.0
1600	2.26	2.03	1.59					2.02	80.0
1800	2.26	2.03	1.59					2.02	69.0
2000	2.26	2.03	1.59					2.02	57.0
2200	2.26	2.03	1.59					2.02	46.0
2400	2.26	2.03	1.59					2.02	40.0
								2.02	36.0
									1.0026
									1.0171
									1.0268
									1.0510
									1.1040
									1.1423
									1.2156
									1.2272
									1.2425
									1.2544
									1.2714
									1.2820
									1.3054
									1.3199
									1.3321
									1.3421
									1.3502
									1.3572
									1.3604

STATION NO. 08048520									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF APRIL 29, 1972									
DATE & TIME	G A G F			N U M B E R			1972 WATER YEAR		
	1-SC	2-SC	3-SC				ACCUM. PRECIP. IN.	DISCHARGE IN.	ACCUM. RUNOFF IN.
APR. 29									
0000	0.0	0.0	0.0				0.0	11.0	0.0005
0100	0.0	0.0	0.0				0.0	10.0	0.0010
0115	0.0	0.0	0.0				0.0	10.0	0.0013
0130	0.0	0.0	0.0				0.0	10.0	0.0015
0145	0.0	0.0	0.0				0.0	10.0	0.0017
0200	0.0	0.0	0.0				0.0	10.0	0.0019
0215	0.0	0.02	0.0				0.01	10.0	0.0021
0230	0.12	0.38	0.03				0.23	9.4	0.0023
0245	0.39	0.69	0.06				0.47	43.0	0.0033
0300	0.46	0.74	0.53				0.61	61.0	0.0046
0315	0.48	0.77	0.57				0.64	159.0	0.0041
0330	0.49	0.78	0.60				0.65	711.0	0.0238
0345	0.49	0.78	0.63				0.66	976.0	0.0453
0400	0.49	0.78	0.63				0.66	1000.0	0.0673
0415	0.49	0.78	0.63				0.66	940.0	0.0840
0430	0.49	0.78	0.63				0.66	750.0	0.1047
0445	0.49	0.78	0.63				0.66	566.0	0.1172
0500	0.49	0.78	0.63				0.66	442.0	0.1317
0530	0.49	0.78	0.63				0.66	317.0	0.1457
0600	0.49	0.78	0.63				0.66	245.0	0.1565
0630	0.49	0.78	0.63				0.66	198.0	0.1652
0700	0.49	0.78	0.63				0.66	180.0	0.1771
0800	0.49	0.78	0.63				0.66	139.0	0.1893
0900	0.49	0.78	0.63				0.66	116.0	0.1995
1000	0.49	0.78	0.63				0.66	95.0	0.2121
1200	0.49	0.78	0.63				0.66	71.0	0.2246
1400	0.49	0.78	0.63				0.66	52.0	0.2337
1600	0.49	0.78	0.63				0.66	40.0	0.2404
1800	0.49	0.78	0.63				0.66	30.0	0.2461
2000	0.49	0.78	0.63				0.66	24.0	0.2503
2200	0.49	0.78	0.63				0.66	20.0	0.2538
2400	0.49	0.78	0.63				0.66	16.0	0.2552

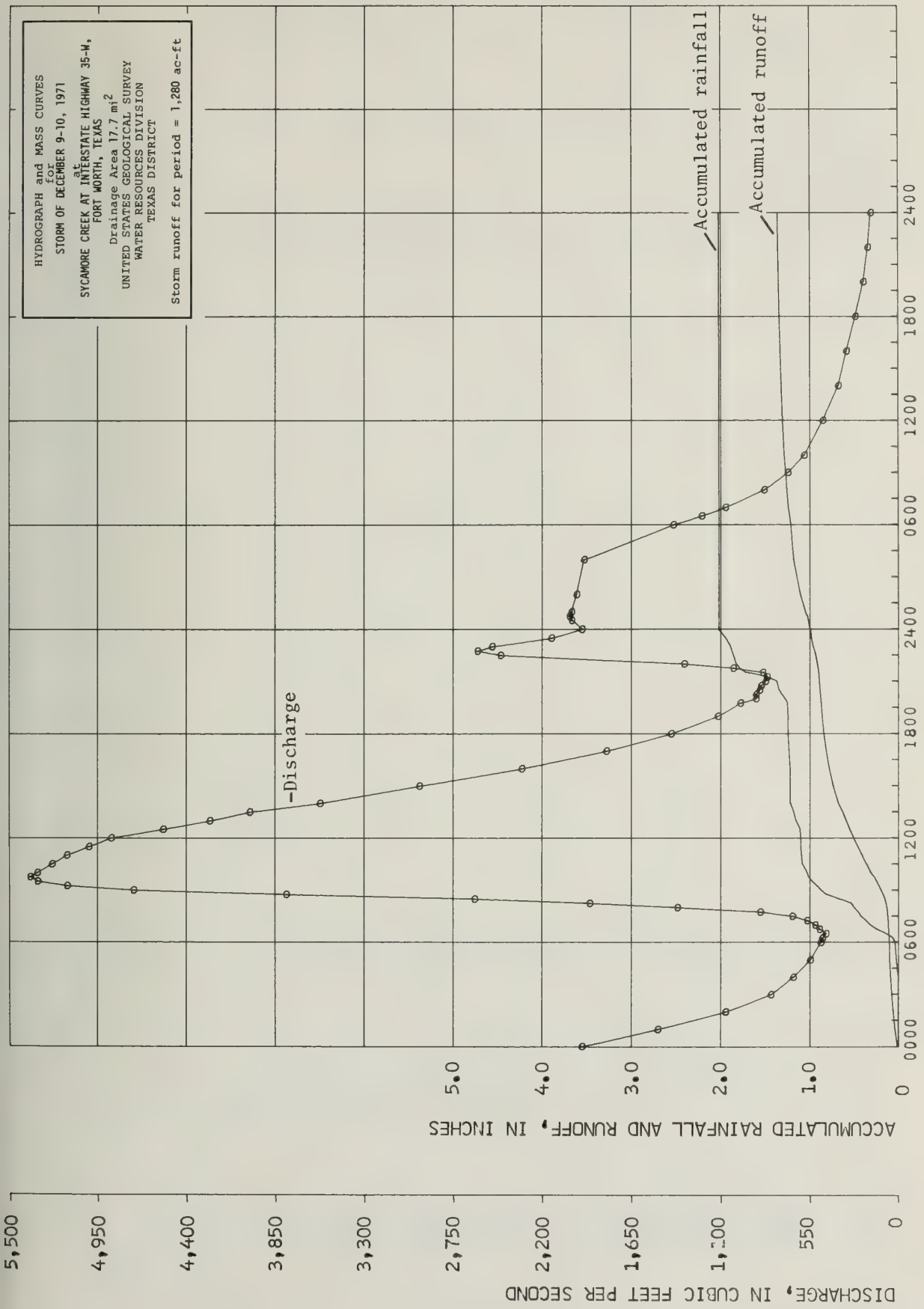




December 8

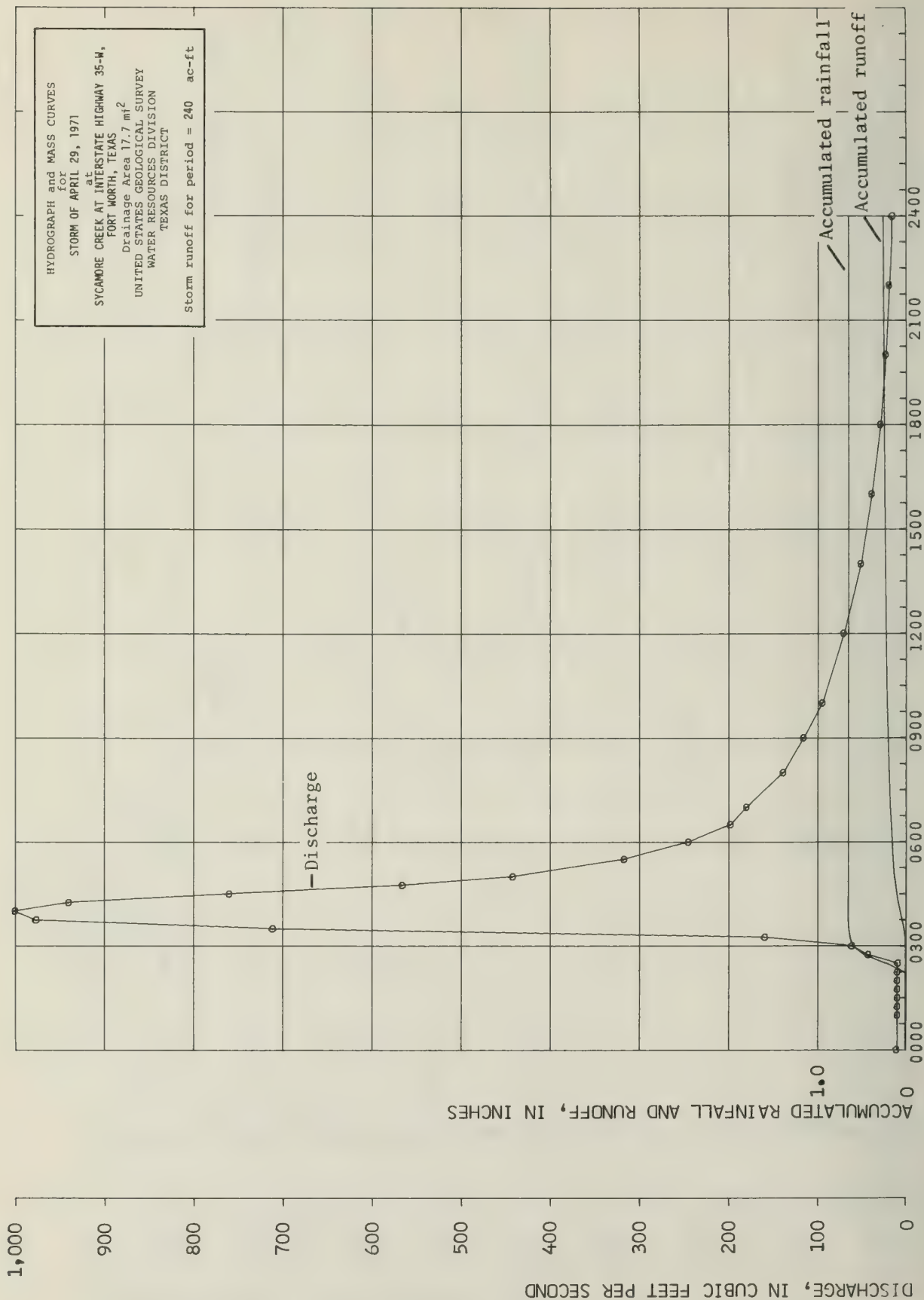
HYDROGRAPH and MASS CURVES
 FOR
 STORM OF DECEMBER 9-10, 1971
 at
 SYCAMORE CREEK AT INTERSTATE HIGHWAY 35-W,
 FORT WORTH, TEXAS
 Drainage Area 17.7 mi²
 UNITED STATES GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 TEXAS DISTRICT

Storm runoff for period = 1,280 ac-ft



October 19

October 20



April 29

STATION NO. 08048530									
SYCAMORE CK TRIB ABV SEM. S. SHOP. CENTER. FT WORTH, TX									
STORM RAINFALL AND RUNOFF RECORD									
TABLE									
1972 WATER YEAR									
OCT. 19									
STA. NO.	PRECIP. IN.	ACCUM. PRECIP. IN.	DISCHARGE IN	FT ³ /S	ACCUM. RUNOFF IN.	STORM OF	OCT. 19-20, 1971	STORM RAINFALL	STORM RUNOFF
0620	1.50	1.15	1.42	112.0	0.1781				
0625	1.51	1.17	1.44	89.0	0.1899				
0630	1.52	1.19	1.45	72.0	0.2041				
0645	1.59	1.22	1.51	43.0	0.2263				
0700	1.67	1.24	1.54	34.0	0.2398				
0715	1.70	1.24	1.61	28.0	0.2510				
0730	1.79	1.31	1.64	24.0	0.2610				
0745	1.86	1.33	1.74	27.0	0.2718				
0800	1.94	1.37	1.81	28.0	0.2886				
0830	2.04	1.44	1.92	31.0	0.3133				
0900	2.09	1.54	1.97	20.0	0.3293				
0930	2.09	1.57	1.98	11.0	0.3381				
1000	2.09	1.57	1.98	6.1	0.3454				
1100	2.09	1.57	1.98	2.8	0.3521				
1300	2.09	1.57	1.98	1.2	0.3559				
1500	2.09	1.57	1.98	0.8	0.3591				
1800	2.09	1.57	1.98	0.5	0.3606				
1845	2.09	1.57	1.98	0.4	0.3610				
1900	2.11	1.57	1.99	0.4	0.3611				
1905	2.16	1.57	2.03	0.4	0.3611				
1910	2.17	1.57	2.04	0.4	0.3612				
1915	2.21	1.62	2.08	0.4	0.3612				
1920	2.26	1.72	2.14	1.6	0.3615				
1925	2.46	1.84	2.32	22.0	0.3644				
1930	2.64	1.92	2.48	60.0	0.3724				
1935	2.91	2.12	2.74	125.0	0.3890				
1940	3.13	2.52	3.00	230.0	0.4196				
1945	3.16	2.71	3.06	337.0	0.4645				
1950	3.17	3.12	3.16	369.0	0.5136				
1955	3.22	3.64	3.31	449.0	0.5734				
2000	3.24	3.64	3.34	509.0	0.6412				
2005	3.26	3.80	3.38	500.0	0.7077				
2010	3.26	4.02	3.43	491.0	0.7731				
2015	3.26	4.22	3.47	492.0	0.8386				
2020	3.26	4.42	3.52	549.0	0.9117				
2025	3.26	4.50	3.53	584.0	0.9894				
2030	3.26	4.50	3.53	557.0	1.0636				
2035	3.41	4.50	3.65	495.0	1.1295				
2040	3.43	4.50	3.67	414.0	1.1846				

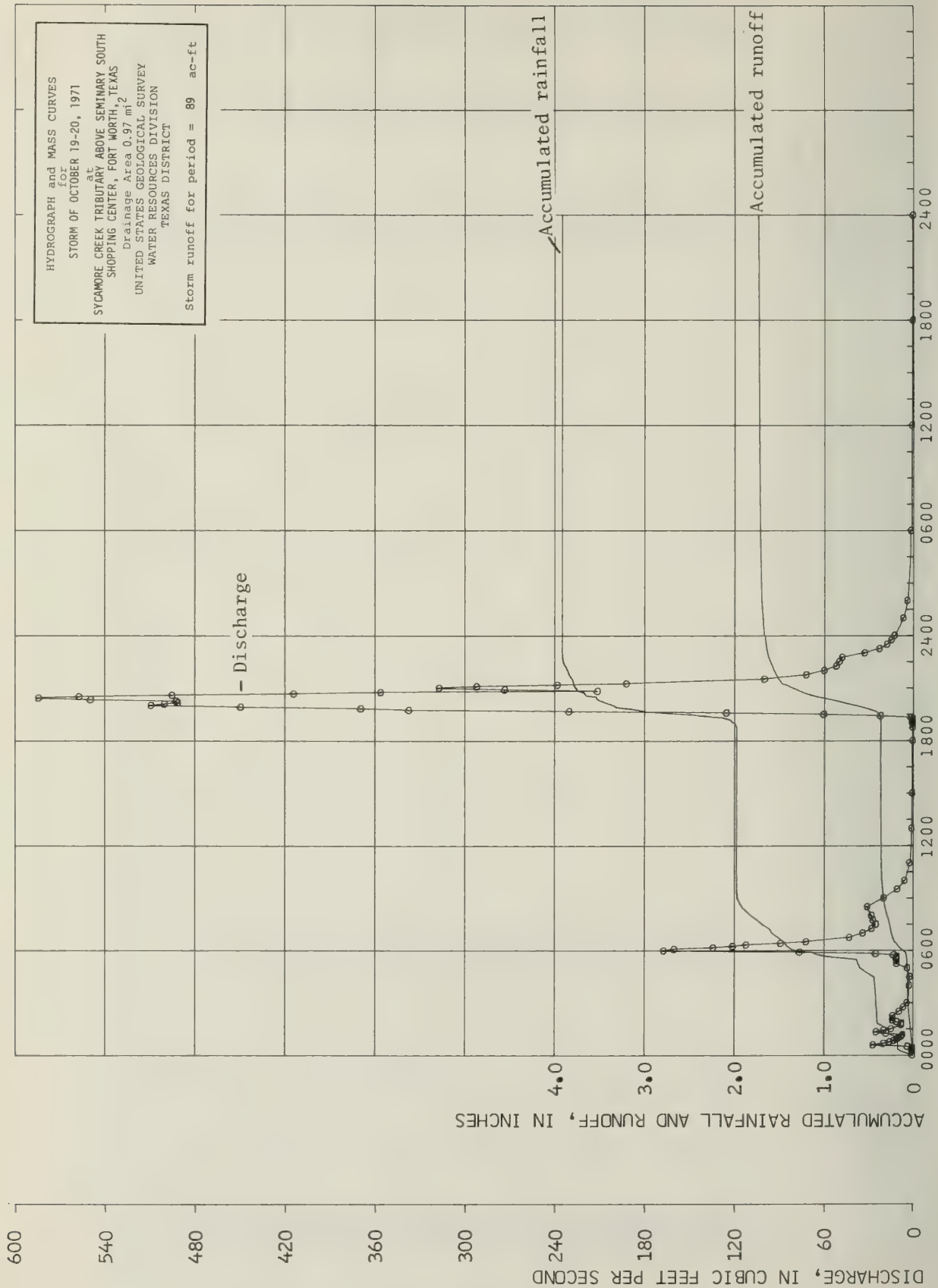
STATION NO. 08048530									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CK TRIP ARV SEM. S. SHOP. CENTER, FT WORTH, TX									
OCT. 19-20, 1971									
DATE & TIME	GAGE		NUMBER		PRECIP.		DISCHARGE		ACCUM. RUNOFF
	1-ST	2-ST			IN.		IN	FT ³ /S	IN.
OCT. 19									
2045	3.44	4.51			3.64		356.0		1.2320
2050	3.45	4.70			3.72		211.0		1.2601
2055	3.45	4.84			3.76		273.0		1.2964
2100	3.45	4.87			3.76		317.0		1.3346
2105	3.46	4.89			3.77		292.0		1.3775
2110	3.47	4.91			3.74		238.0		1.4092
2115	3.47	4.92			3.79		192.0		1.4603
2130	3.47	4.97			3.80		100.0		1.5002
2145	3.51	4.99			3.84		72.0		1.5290
2200	3.52	5.03			3.85		60.0		1.5529
2215	3.54	5.07			3.88		52.0		1.5737
2230	3.56	5.12			3.90		50.0		1.5937
2245	3.56	5.16			3.91		48.0		1.6128
2300	3.56	5.17			3.91		33.0		1.6260
2315	3.56	5.17			3.91		23.0		1.6352
2330	3.56	5.17			3.91		18.0		1.6424
2345	3.56	5.17			3.91		15.0		1.6484
2400	3.56	5.17			3.91		13.0		1.6510
OCT. 20									
0000	3.56	5.17			3.91		13.0		1.6614
0100	3.56	5.17			3.91		7.1		1.6727
0200	3.56	5.17			3.91		4.4		1.6903
0600	3.56	5.17			3.91		1.8		1.7047
1200	3.56	5.17			3.91		1.1		1.7152
1800	3.56	5.17			3.91		0.7		1.7216
2400	3.56	5.17			3.91		0.5		1.7241

STATION NO. 08048530									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CK TRIP ADV SFM. S. SHOP. CENTER. FT NORTH. TX									
DEC. 9-10, 1971									
DATE & TIME									
G A G F N U M B E R									
2-ST									
ACCUM. DISCHARGE IN. IN.									
PRECIP. FT ³ /S IN.									
DEC. 9									
0000	0.0						0.0	3.5	0.0112
0400	0.0						0.0	1.9	0.0180
0430	0.0						0.0	1.9	0.0195
0500	0.01						0.01	1.9	0.0210
0530	0.03						0.03	1.8	0.0225
0600	0.04						0.04	2.2	0.0238
0615	0.05						0.05	2.2	0.0247
0630	0.06						0.06	2.2	0.0254
0640	0.15						0.15	2.5	0.0259
0645	0.17						0.17	18.0	0.0283
0650	0.19						0.19	44.0	0.0342
0655	0.22						0.22	51.0	0.0410
0700	0.25						0.25	53.0	0.0480
0705	0.26						0.26	50.0	0.0547
0710	0.27						0.27	50.0	0.0613
0715	0.28						0.28	52.0	0.0682
0720	0.29						0.29	56.0	0.0757
0725	0.32						0.32	60.0	0.0837
0730	0.34						0.34	66.0	0.0925
0735	0.36						0.36	73.0	0.1022
0740	0.38						0.38	76.0	0.1123
0745	0.41						0.41	75.0	0.1223
0750	0.42						0.42	82.0	0.1332
0755	0.44						0.44	86.0	0.1447
0800	0.45						0.45	115.0	0.1600
0805	0.48						0.48	130.0	0.1773
0810	0.50						0.50	121.0	0.1934
0815	0.51						0.51	99.0	0.2066
0820	0.52						0.52	89.0	0.2184
0825	0.53						0.53	74.0	0.2289
0830	0.60						0.60	42.0	0.2398
0835	0.70						0.70	113.0	0.2549
0840	0.74						0.74	137.0	0.2731
0845	0.75						0.75	129.0	0.2903
0850	0.76						0.76	127.0	0.3072
0855	0.84						0.84	147.0	0.3268
0900	0.87						0.87	146.0	0.3462
0905	0.88						0.88	142.0	0.3651
0910	0.89						0.89	130.0	0.3824

STATION NO. 08048530									
SYCAMORE CK TRIP ARV SEM. S. SHOP. CENTER, FT WORTH, TX									
STORM RAINFALL AND RUNOFF RECORD									
TABLE									
DEC. 9-10, 1971									
DATE & TIME	2-ST	GAGE	NUMBER	STORM OF	DEC. 9-10, 1971	PRECIP.	ACCUM.	DISCHARGE	IN.
						IN.	IN.	IN.	IN.
DEC. 9									
0915	0.90					0.90		111.0	0.3972
0920	0.91					0.91		103.0	0.4109
0925	0.93					0.93		89.0	0.4228
0930	0.95					0.95		85.0	0.4341
0935	0.98					0.98		92.0	0.4463
0940	1.00					1.00		91.0	0.4584
0945	1.01					1.01		88.0	0.4819
1000	1.03					1.03		66.0	0.5082
1015	1.07					1.07		55.0	0.5306
1030	1.10					1.10		53.0	0.5518
1045	1.11					1.11		59.0	0.5753
1100	1.11					1.11		48.0	0.5945
1115	1.11					1.11		35.0	0.6085
1130	1.12					1.12		28.0	0.6197
1145	1.13					1.13		23.0	0.6288
1200	1.14					1.14		20.0	0.6488
1300	1.15					1.15		16.0	0.6744
1400	1.25					1.25		21.0	0.7079
1500	1.25					1.25		13.0	0.7287
1600	1.25					1.25		8.5	0.7423
1700	1.26					1.26		6.9	0.7588
1800	1.26					1.26		4.5	0.7678
1900	1.29					1.29		4.2	0.7703
1945	1.30					1.30		4.5	0.7747
2000	1.36					1.36		13.0	0.7851
2030	1.41					1.41		16.0	0.7946
2100	1.42					1.42		14.0	0.8002
2115	1.57					1.57		24.0	0.8066
2130	1.60					1.60		71.0	0.8161
2135	1.70					1.70		107.0	0.8303
2140	1.72					1.72		160.0	0.8516
2145	1.73					1.73		204.0	0.8744
2150	1.74					1.74		184.0	0.9033
2155	1.75					1.75		154.0	0.9238
2200	1.75					1.75		130.0	0.9411
2205	1.79					1.79		99.0	0.9543
2210	1.80					1.80		92.0	0.9685
2215	1.80					1.80		101.0	0.9800
2220									

TABLE 1									
STATION NO. 08049530									
SYCAMORE CK TRIA ARV SFM. S. SHOP. CENTER, FT NORTH, TX									
DATE & TIME									
2-ST									
GAGE									
STORM RAINFALL AND RUNOFF RECORD									
DEC. 9-10, 1971									
ACCUM. DISCHARGE/ IN. RUNOFF									
PRECIP. FT ³ /S IN.									
1972 WATER YEAR									
DEC. 9									
2225	1.80							85.0	0.9913
2230	1.80							76.0	1.0014
2235	1.80							70.0	1.0107
2240	1.81							63.0	1.0191
2245	1.81							57.0	1.0267
2250	1.82							53.0	1.0337
2255	1.83							53.0	1.0408
2300	1.84							49.0	1.0538
2315	1.85							42.0	1.0706
2330	1.89							38.0	1.0858
2345	1.91							37.0	1.1006
2400	1.95							39.0	1.1093
DEC. 10									
0000	1.95							39.0	1.1161
0015	2.02							49.0	1.1357
0030	2.02							42.0	1.1525
0045	2.02							30.0	1.1645
0100	2.02							24.0	1.1740
0115	2.02							20.0	1.1820
0130	2.02							17.0	1.1888
0145	2.02							16.0	1.1952
0200	2.02							14.0	1.2036
0230	2.02							12.0	1.2132
0300	2.02							9.8	1.2249
0400	2.02							6.9	1.2415
0600	2.02							4.5	1.2702
1200	2.02							2.1	1.3004
2400	2.02							1.1	1.3109

STATION NO. 08048530									
SYCAMORE CK TRIBUTARY SEM. S. SHOP. CENTER, FT WORTH, TX									
STORM RAINFALL AND RUNOFF RECORD									
TABLE									
APR. 29, 1972									
1972 WATER YEAR									
DATE & TIME	GAGE		STORM OF		PRECIP.		DISCHARGE		ACCUM. RUNOFF
	1-ST	2-ST	1	2	IN.	FT ³ /S	IN.	IN.	
APR. 29									
0000	0.0	0.0			0.0	0.3		0.0002	0.0002
0100	0.02	0.0			0.02	0.3		0.0005	0.0005
0130	0.05	0.02			0.04	0.3		0.0006	0.0006
0145	0.05	0.02			0.04	0.5		0.0008	0.0008
0150	0.06	0.03			0.05	0.7		0.0009	0.0009
0155	0.15	0.05			0.13	0.8		0.0010	0.0010
0200	0.45	0.07			0.37	1.5		0.0012	0.0012
0205	0.70	0.12			0.57	7.7		0.0022	0.0022
0210	0.77	0.62			0.74	71.0		0.0116	0.0116
0215	0.80	1.00			0.84	218.0		0.0407	0.0407
0220	0.82	1.04			0.87	313.0		0.0823	0.0823
0225	0.84	1.08			0.89	192.0		0.1079	0.1079
0230	0.88	1.12			0.93	128.0		0.1249	0.1249
0235	0.90	1.17			0.96	106.0		0.1390	0.1390
0240	0.92	1.19			0.98	70.0		0.1484	0.1484
0245	0.95	1.20			1.00	58.0		0.1561	0.1561
0250	0.97	1.20			1.02	54.0		0.1633	0.1633
0255	0.97	1.20			1.02	47.0		0.1695	0.1695
0300	0.97	1.20			1.02	42.0		0.1751	0.1751
0305	0.97	1.20			1.02	34.0		0.1796	0.1796
0310	0.97	1.20			1.02	27.0		0.1832	0.1832
0315	0.97	1.20			1.02	22.0		0.1891	0.1891
0330	0.97	1.20			1.02	15.0		0.1951	0.1951
0345	0.97	1.20			1.02	9.0		0.1987	0.1987
0400	0.97	1.20			1.02	6.9		0.2028	0.2028
0430	0.97	1.20			1.02	4.4		0.2063	0.2063
0500	0.97	1.20			1.02	3.2		0.2099	0.2099
0530	0.97	1.20			1.02	2.5		0.2109	0.2109
0600	0.97	1.20			1.02	2.0		0.2133	0.2133
0700	0.97	1.20			1.02	1.5		0.2157	0.2157
0800	0.97	1.20			1.02	1.1		0.2174	0.2174
0900	0.97	1.20			1.02	0.9		0.2189	0.2189
1000	0.97	1.20			1.02	0.8		0.2208	0.2208
1200	0.97	1.20			1.02	0.7		0.2229	0.2229
1400	0.97	1.20			1.02	0.6		0.2248	0.2248
1600	0.97	1.20			1.02	0.5		0.2265	0.2265
2400	0.97	1.20			1.02	0.4		0.2310	0.2310



HYDROGRAPH and MASS CURVES
 STORM OF DECEMBER 8, 1971
 SYCAMORE CREEK TRIBUTARY, ABOVE SEMINARY SOUTH
 SHOPPING CENTER, FORT WORTH, TEXAS
 Drainage Area 0.97 mi²
 UNITED STATES GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 TEXAS DISTRICT

Storm runoff for period = 25 ac-ft

- Discharge

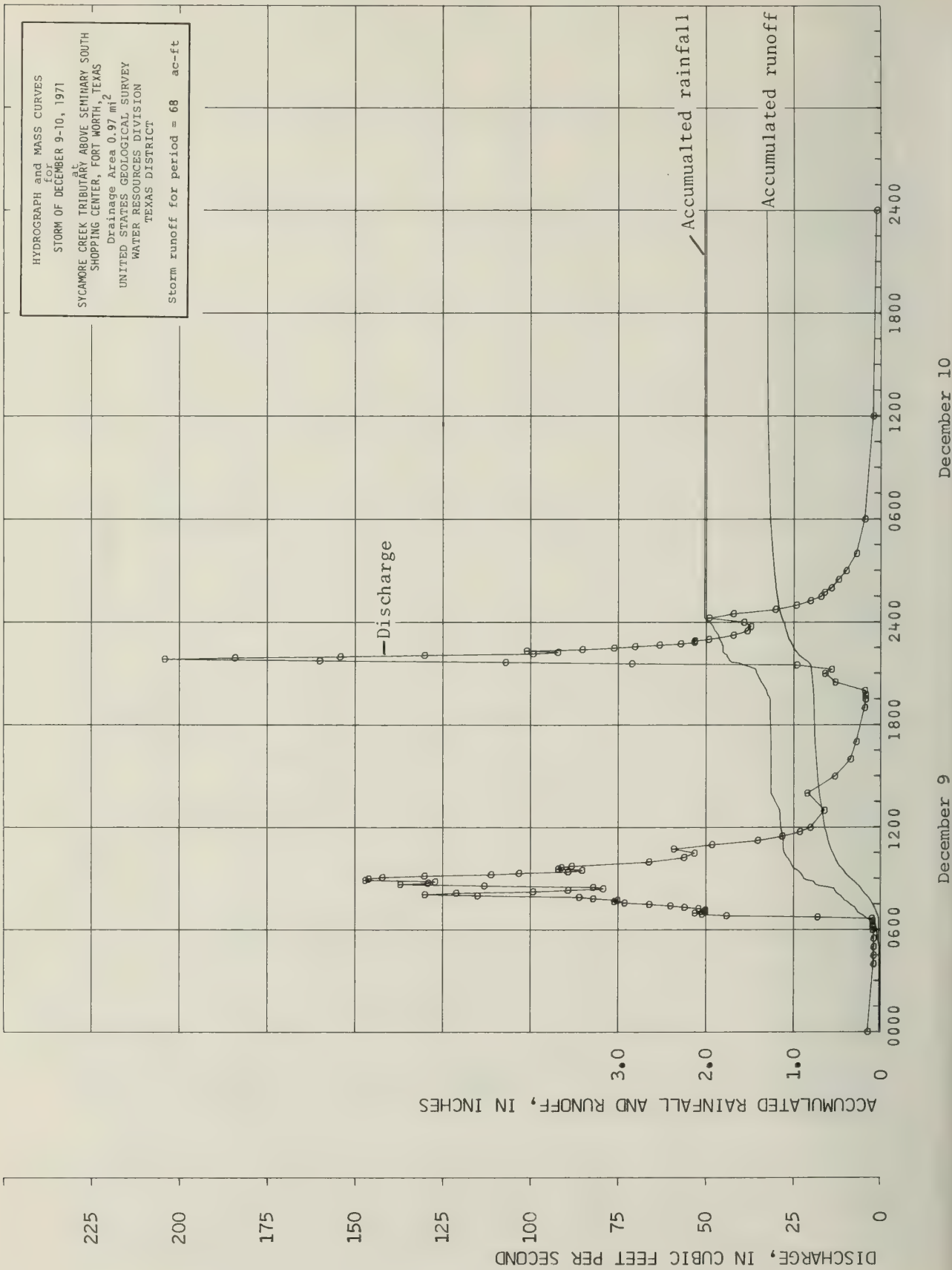
Accumulated rainfall

Accumulated runoff

ACCUMLATED RAINFALL AND RUNOFF, IN INCHES

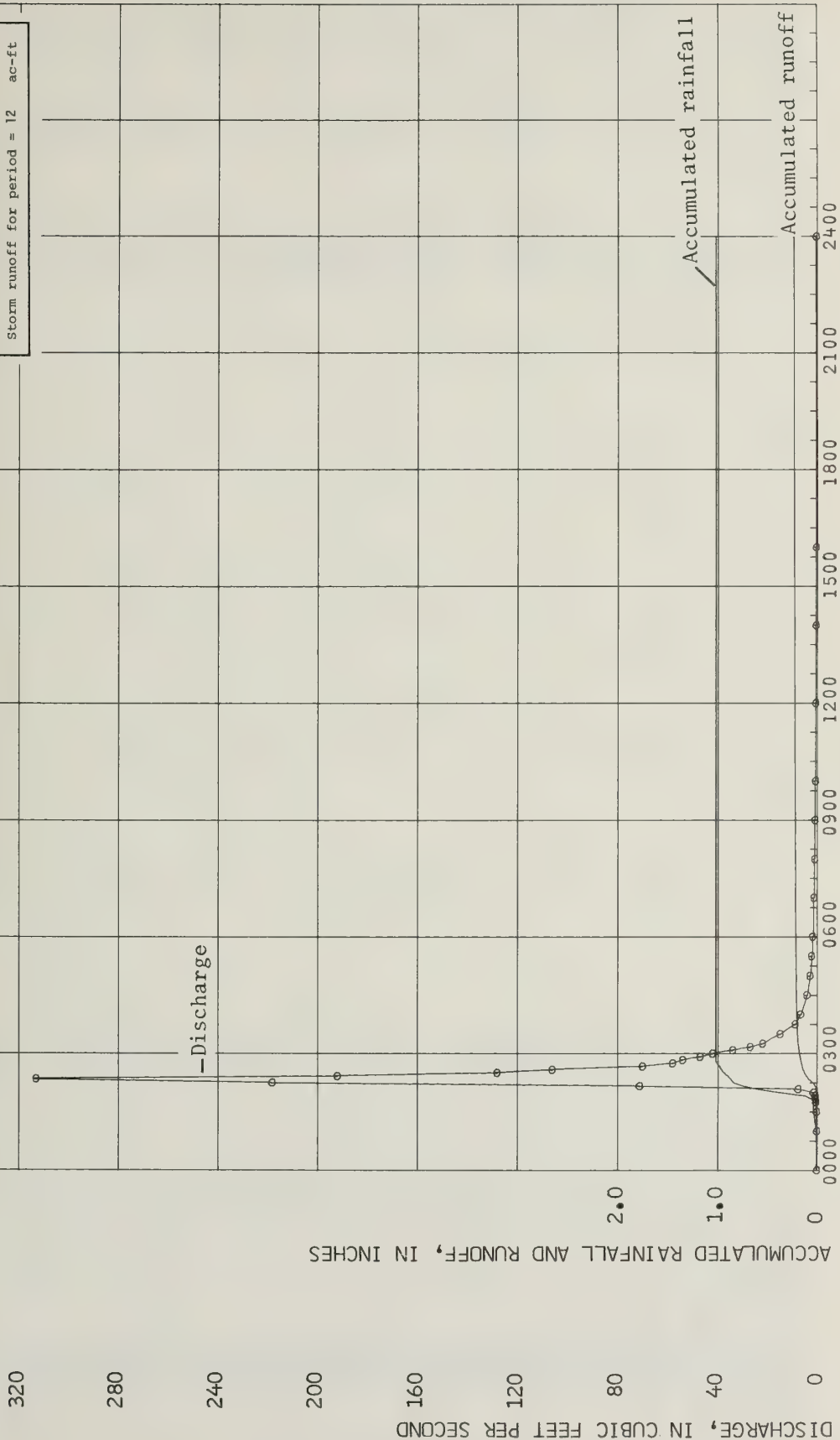
DISCHARGE, IN CUBIC FEET PER SECOND

December 8



HYDROGRAPH and MASS CURVES
for
at
STORM OF APRIL 29, 1972
SYCAMORE CREEK TRIBUTARY ABOVE SEMINARY SOUTH
SHOPPING CENTER, FORT WORTH, TEXAS
Drainage Area 0.97 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 12 ac-ft



April 29

TABLE									
STA. NO. 08048540		1972 WATER YEAR							
SYCAMORE CK TRIBUTARY AT INTERSTATE HWY 35-W. FT WORTH, TEX. STORM OF OCT. 19-20, 1971									
--- STORM RAINFALL AND RUNOFF RECORD ---									
DATE & TIME	GAGE NUMBER				ACCU. PRECIP. IN.	DISCHARGE IN	FT ³ /S	IN.	ACCUM. RUNOFF
	1-ST	2-ST							
OCT. 19									
0000	0.0	0.0			0.0		0.9		0.0001
0015	0.19	0.0			0.11		0.9		0.0003
0020	0.14	0.08			0.14		0.8		0.0004
0025	0.19	0.09			0.15		4.5		0.0008
0030	0.19	0.09			0.15		18.0		0.0025
0035	0.19	0.09			0.15		15.0		0.0040
0040	0.19	0.09			0.15		33.0		0.0071
0045	0.19	0.09			0.15		23.0		0.0093
0050	0.19	0.09			0.15		16.0		0.0108
0055	0.19	0.09			0.15		12.0		0.0120
0100	0.19	0.09			0.15		10.0		0.0130
0105	0.22	0.13			0.18		9.1		0.0138
0110	0.22	0.38			0.29		122.0		0.0255
0115	0.22	0.45			0.32		316.0		0.0557
0120	0.22	0.45			0.32		204.0		0.0752
0125	0.22	0.45			0.32		75.0		0.0824
0130	0.22	0.45			0.32		42.0		0.0904
0145	0.35	0.45			0.39		17.0		0.0937
0150	0.37	0.53			0.44		27.0		0.0963
0155	0.37	0.54			0.44		50.0		0.1011
0200	0.37	0.54			0.44		35.0		0.1078
0215	0.37	0.55			0.45		23.0		0.1144
0230	0.37	0.55			0.45		14.0		0.1184
0245	0.38	0.55			0.45		11.0		0.1215
0300	0.38	0.56			0.46		8.2		0.1274
0400	0.39	0.58			0.47		6.4		0.1329
0430	0.40	0.59			0.48		4.9		0.1357
0500	0.58	0.67			0.62		12.0		0.1409
0515	0.60	0.69			0.64		17.0		0.1458
0530	0.62	0.70			0.66		16.0		0.1488
0535	0.79	0.71			0.75		15.0		0.1503
0540	1.02	0.71			0.88		15.0		0.1517
0545	1.14	0.72			0.96		20.0		0.1536
0550	1.19	0.78			1.01		64.0		0.1597
0555	1.22	0.85			1.06		234.0		0.1821
0600	1.39	0.98			1.21		321.0		0.2128
0605	1.46	1.03			1.27		291.0		0.2407
0610	1.48	1.05			1.29		246.0		0.2642
0615	1.49	1.13			1.33		230.0		0.2862

STA. NO.	DATE & TIME	SYCAMORE CK TRIB AT INTERSTATE HWY 35-W, FT WORTH, TEX.										SYCAMORE CK TRIB AT INTERSTATE HWY 35-W, FT WORTH, TEX.							
		TABLE										TABLE							
		STORM RAINFALL AND RUNOFF RECORD										STORM RAINFALL AND RUNOFF RECORD							
		1-ST		2-ST		G A G E		N U M B E R		S T O R M O F OCT. 19-20, 1971		A C C U M .		D I S C H A R G E		A C C U M .			
												P R E C I P .		I N		F T ³ / S		I N .	
OCT. 19																			
0620	1.50	1.15										1.35		203.0		0.3056			
0625	1.51	1.17										1.36		193.0		0.3241			
0630	1.52	1.19										1.37		160.0		0.3547			
0645	1.59	1.22										1.43		75.0		0.3762			
0700	1.57	1.26										1.49		60.0		0.3934			
0715	1.70	1.24										1.52		47.0		0.4069			
0730	1.79	1.31										1.58		45.0		0.4198			
0745	1.86	1.33										1.63		43.0		0.4322			
0800	1.94	1.37										1.69		47.0		0.4524			
0830	2.04	1.48										1.79		58.0		0.4857			
0900	2.09	1.54										1.85		30.0		0.5029			
0930	2.09	1.57										1.86		13.0		0.5104			
1000	2.09	1.57										1.86		8.0		0.5172			
1100	2.09	1.57										1.86		4.5		0.5250			
1300	2.09	1.57										1.86		2.3		0.5303			
1500	2.09	1.57										1.86		1.5		0.5346			
1800	2.09	1.57										1.86		1.1		0.5369			
1845	2.09	1.57										1.86		0.8		0.5374			
1900	2.11	1.57										1.87		0.5		0.5375			
1905	2.16	1.57										1.90		0.5		0.5375			
1910	2.17	1.57										1.91		1.1		0.5376			
1915	2.21	1.62										1.95		4.9		0.5381			
1920	2.26	1.72										2.02		17.0		0.5397			
1925	2.46	1.84										2.19		85.0		0.5479			
1930	2.64	1.92										2.32		207.0		0.5677			
1935	2.71	2.12										2.56		309.0		0.5972			
1940	3.13	2.52										2.86		462.0		0.6414			
1945	3.16	2.71										2.96		588.0		0.6977			
1950	3.17	3.12										3.15		751.0		0.7695			
1955	3.22	3.64										3.40		850.0		0.8508			
2000	3.24	3.64										3.44		1030.0		0.9493			
2005	3.26	3.80										3.50		1090.0		1.0516			
2010	3.26	4.02										3.59		1020.0		1.1569			
2015	3.26	4.22										3.68		1100.0		1.2621			
2020	3.26	4.42										3.77		1090.0		1.3664			
2025	3.26	4.50										3.81		1100.0		1.4716			
2030	3.26	4.50										3.81		995.0		1.5668			
2035	3.41	4.50										3.89		902.0		1.6435			
2040	3.43	4.50										3.90		787.0		1.7167			

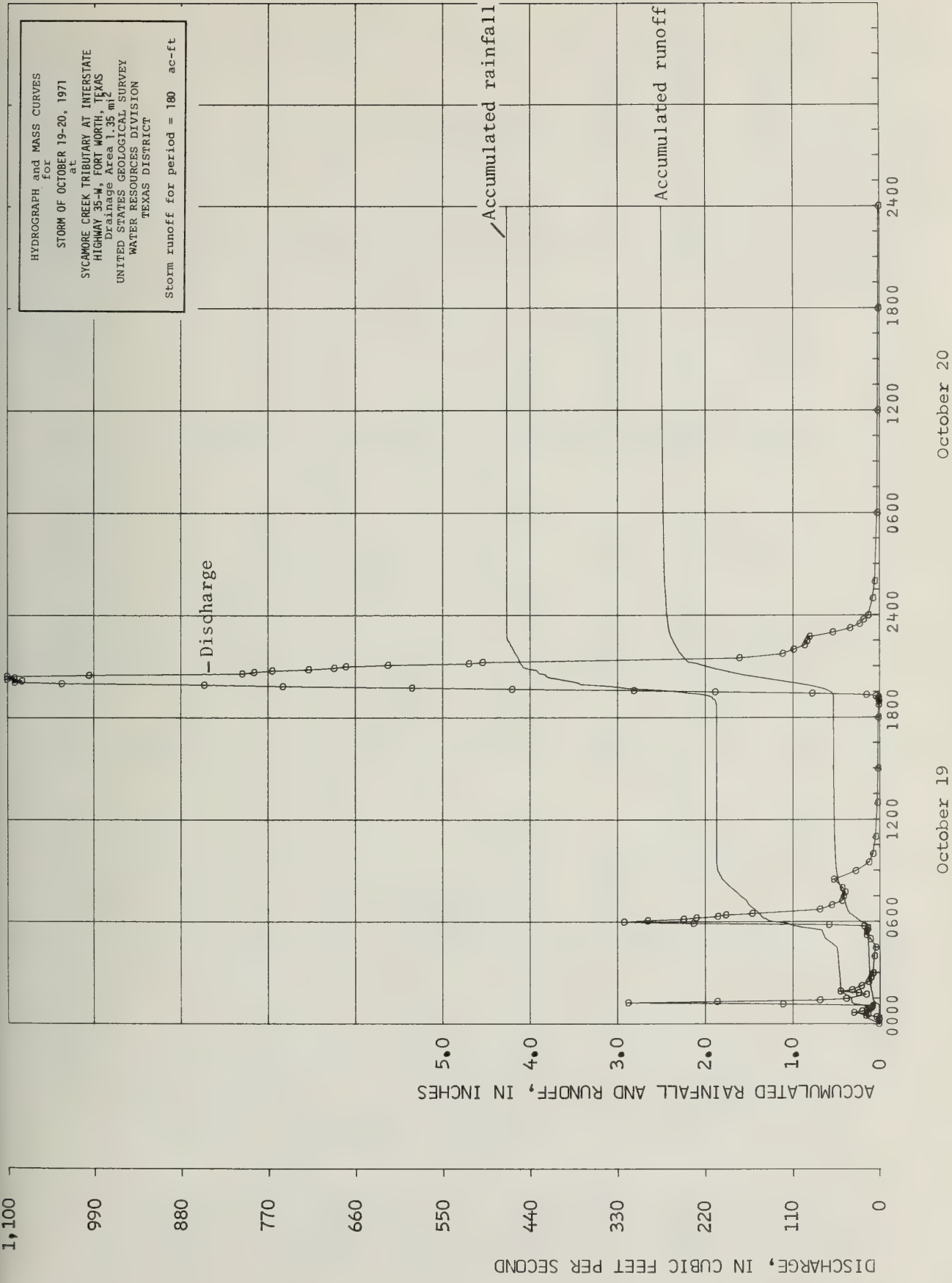
TABLE									
STATION 0804R540									
SYCAMORE CK TRIP AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
DATE & TIME	G A G E		S T O R M N U M B E R		P R E C I P .		1972 WATER YEAR		
	1-ST	2-ST			IN.	FT ³ /S	DISCHARGE IN	ACCUM. RUNOFF	IN.
OCT. 19									
2045	3.44	4.51			3.91	74.0			1.7918
2050	3.45	4.70			4.00	718.0			1.8605
2055	3.45	4.84			4.06	686.0			1.9261
2100	3.45	4.87			4.07	671.0			1.9903
2105	3.46	4.89			4.09	618.0			2.0494
2110	3.47	4.91			4.10	516.0			2.0988
2115	3.47	4.92			4.11	499.0			2.1942
2130	3.47	4.97			4.13	176.0			2.2447
2145	3.51	4.99			4.16	122.0			2.2798
2200	3.52	5.03			4.18	108.0			2.3107
2215	3.54	5.07			4.21	94.0			2.3377
2230	3.56	5.12			4.25	91.0			2.3638
2245	3.56	5.16			4.26	88.0			2.3891
2300	3.56	5.17			4.27	59.0			2.4060
2315	3.56	5.17			4.27	37.0			2.4166
2330	3.56	5.17			4.27	25.0			2.4238
2345	3.56	5.17			4.27	20.0			2.4295
2400	3.56	5.17			4.27	14.0			2.4316
OCT. 20									
0000	3.56	5.17			4.27	14.0			2.4396
0100	3.56	5.17			4.27	8.0			2.4488
0200	3.56	5.17			4.27	5.4			2.4643
0400	3.56	5.17			4.27	2.6			2.4792
1200	3.56	5.17			4.27	1.8			2.4916
1800	3.56	5.17			4.27	1.1			2.4992
2400	3.56	5.17			4.27	0.8			2.5017

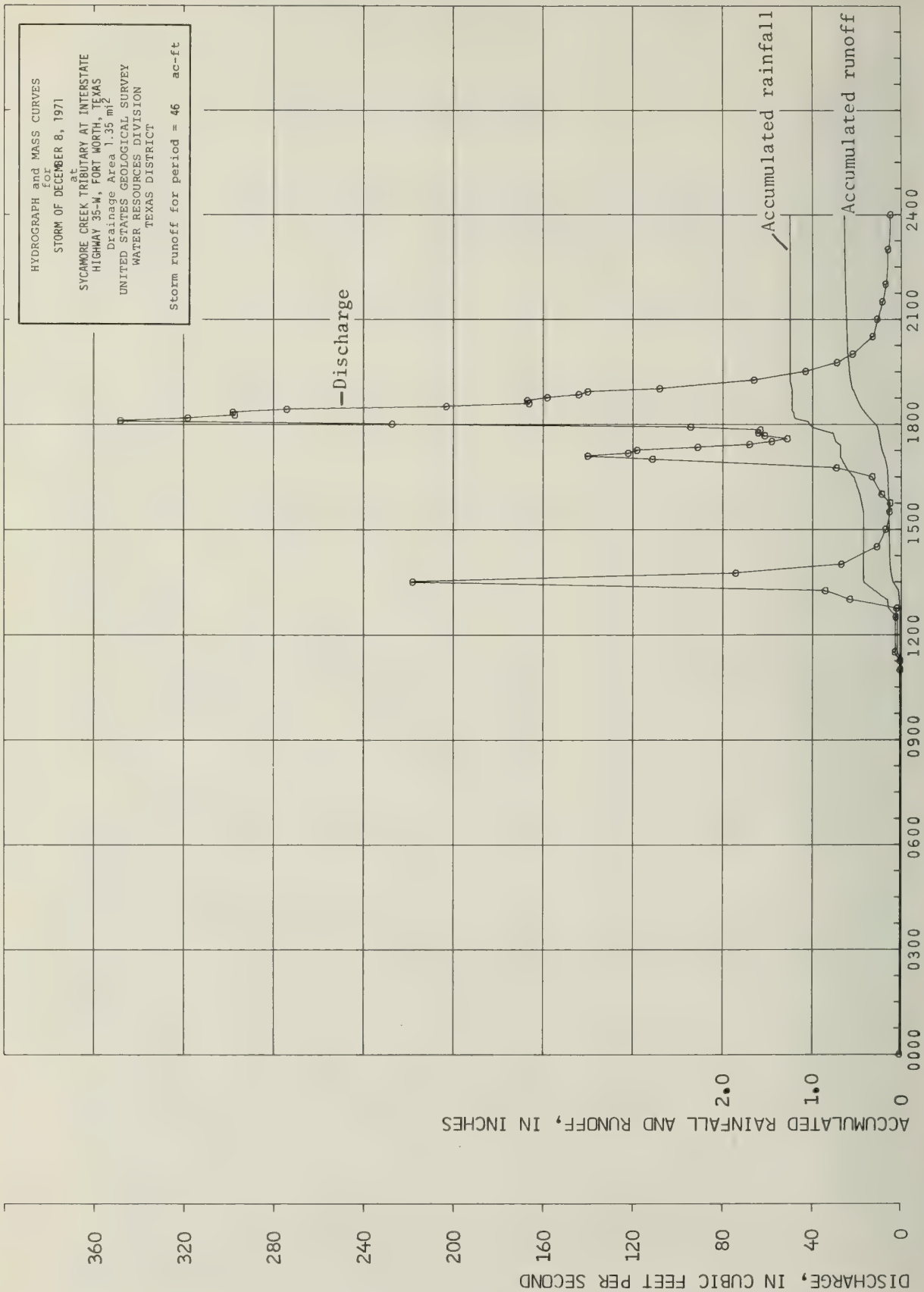
STATION NO. 0804R540									
TABLE									
SYCAMORE CK TRIR AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
DATE & TIME	P-ST	GAGE	NUMBER	DEC. 9-10, 1971	ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE IN	FT ³ /S	ACCUM. RUNOFF IN.	ACCUM. RUNOFF
DEC. 9									
0000	0.0				0.0	4.5		0.0103	
0400	0.0				0.0	2.6		0.0170	
0430	0.0				0.0	2.6		0.0185	
0500	0.01				0.01	2.3		0.0199	
0530	0.03				0.03	2.3		0.0212	
0600	0.04				0.04	3.4		0.0226	
0615	0.05				0.05	3.4		0.0236	
0630	0.06				0.06	3.4		0.0244	
0640	0.15				0.15	8.5		0.0256	
0645	0.17				0.17	30.0		0.0285	
0650	0.19				0.19	48.0		0.0331	
0655	0.22				0.22	77.0		0.0405	
0700	0.25				0.25	84.0		0.0445	
0705	0.26				0.26	99.0		0.0540	
0710	0.27				0.27	87.0		0.0643	
0715	0.24				0.24	81.0		0.0741	
0720	0.29				0.29	82.0		0.0819	
0725	0.32				0.32	104.0		0.0912	
0730	0.34				0.34	111.0		0.1025	
0735	0.36				0.36	109.0		0.1129	
0740	0.34				0.34	160.0		0.1242	
0745	0.41				0.41	167.0		0.1442	
0750	0.42				0.42	148.0		0.1543	
0755	0.44				0.44	143.0		0.1758	
0800	0.45				0.45	109.0		0.1863	
0805	0.44				0.44	171.0		0.2026	
0810	0.50				0.50	227.0		0.2243	
0815	0.51				0.51	173.0		0.2409	
0820	0.52				0.52	150.0		0.2552	
0825	0.53				0.53	124.0		0.2671	
0830	0.60				0.60	158.0		0.2822	
0835	0.70				0.70	190.0		0.3004	
0840	0.74				0.74	264.0		0.3256	
0845	0.75				0.75	268.0		0.3513	
0850	0.76				0.76	260.0		0.3761	
0855	0.84				0.84	260.0		0.4010	
0900	0.87				0.87	270.0		0.4244	
0905	0.84				0.84	254.0		0.4515	
0910	0.89				0.89	263.0		0.4757	

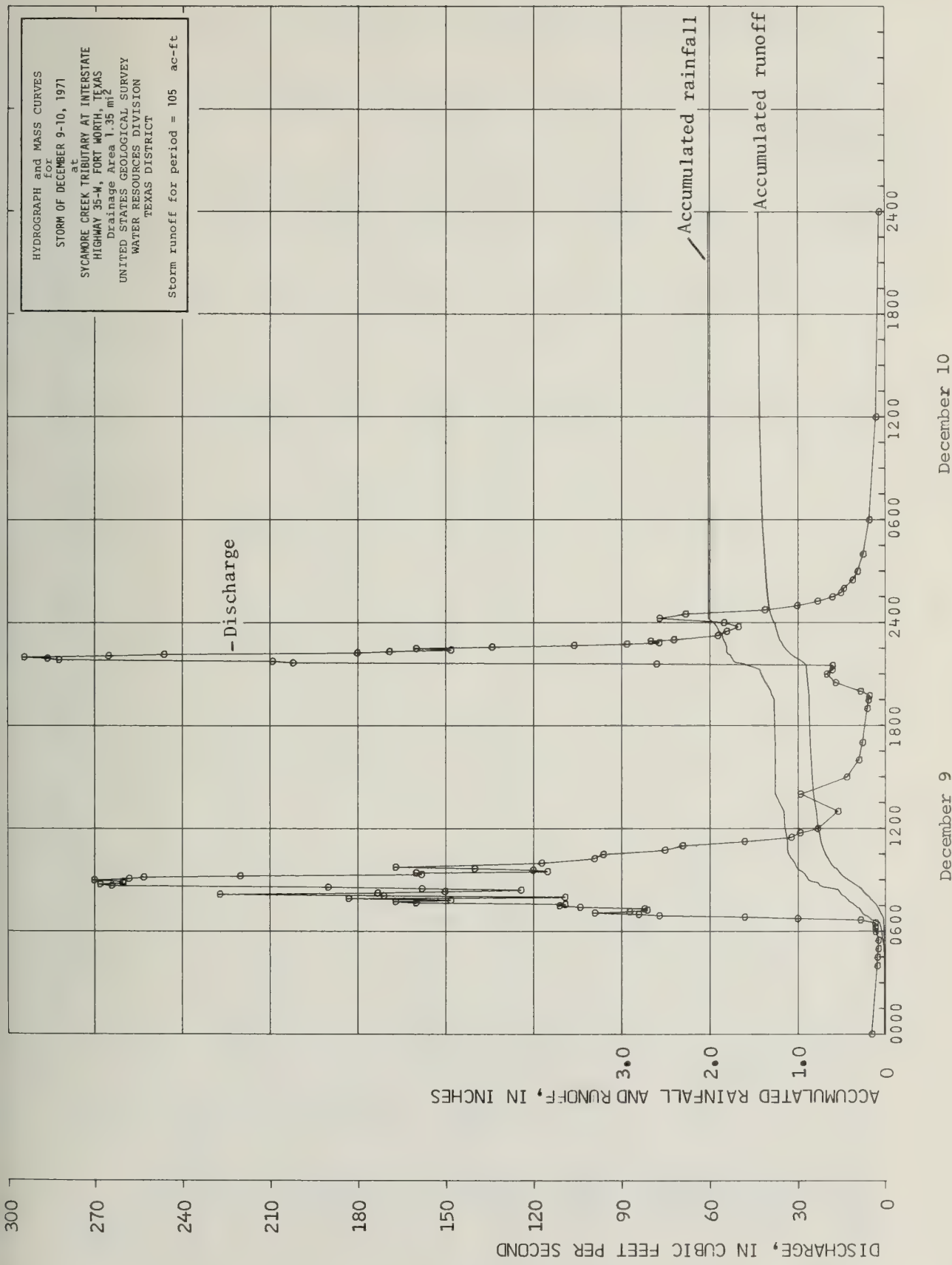
STA. NO. 08048540		TABLE STORM RAINFALL AND RUNOFF RECORD										1972 WATER YEAR	
SYCAMORE CK TRIB AT INTERSTATE HWY 35-W, FT WORTH, TEX.		STORM OF DEC. 9-10, 1971										DISCHARGE	
DATE & TIME		G A G E N U M B E R										ACCUM. PRECIP.	
		2-ST										IN.	
DEC. 9												FT3/S	
												IN.	
0915		0.90										220.0	0.4967
0920		0.91										158.0	0.5119
0925		0.93										160.0	0.5272
0930		0.95										115.0	0.5382
0935		0.94										120.0	0.5496
0940		1.00										140.0	0.5630
0945		1.01										167.0	0.5950
1000		1.03										117.0	0.6286
1015		1.07										99.0	0.6570
1030		1.10										96.0	0.6845
1045		1.11										75.0	0.7060
1100		1.11										69.0	0.7258
1115		1.11										48.0	0.7396
1130		1.12										32.0	0.7488
1145		1.13										29.0	0.7571
1200		1.14										23.0	0.7736
1300		1.15										16.0	0.7920
1400		1.25										29.0	0.8253
1500		1.25										13.0	0.8402
1600		1.25										8.9	0.8504
1700		1.25										8.9	0.8635
1900		1.26										6.0	0.8721
1930		1.26										5.6	0.8745
1945		1.29										5.3	0.8760
2000		1.30										8.5	0.8797
2030		1.36										17.0	0.8894
2100		1.41										20.0	0.8941
2115		1.42										18.0	0.9032
2130		1.57										18.0	0.9067
2135		1.60										78.0	0.9141
2140		1.70										202.0	0.9334
2145		1.72										209.0	0.9534
2150		1.73										282.0	0.9804
2155		1.74										286.0	1.0078
2200		1.75										294.0	1.0359
2205		1.75										265.0	1.0612
2210		1.79										246.0	1.0848
2215		1.80										180.0	1.1020
2220		1.80										169.0	1.1181

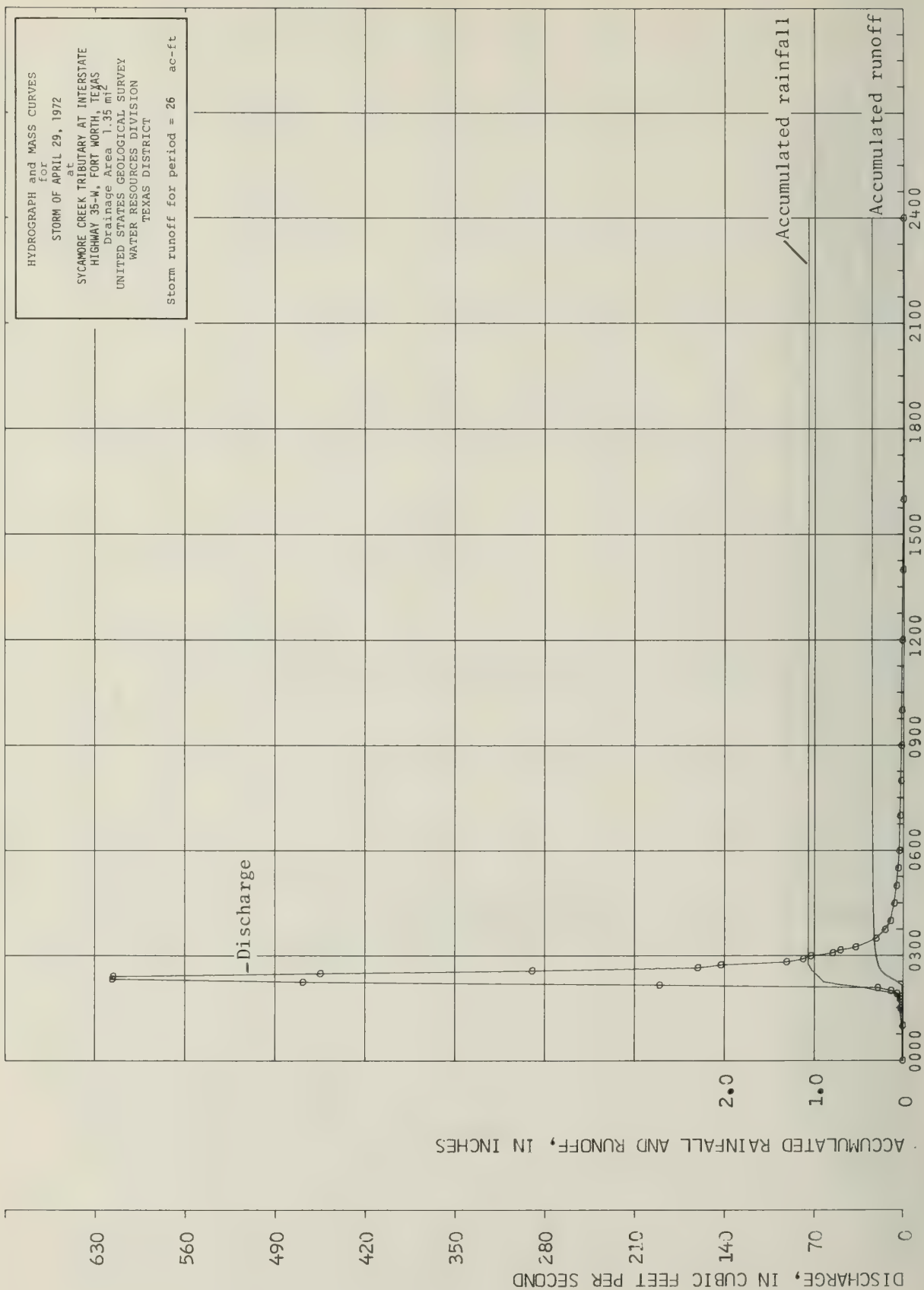
STATION NO. 04048540									
TARLF									
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CK TRIP AT INTERSTATE HWY 35-W. FT WORTH, TEX.									
STORM OF DEC. 9-10, 1971									
DATE & TIME	G A G E				N U M B E R		1972 WATER YEAR		
	2-ST						DISCHARGE IN	ACCUM. IN	RUNOFF IN.
DEC. 9									
2225	1.80						148.0	1.80	1.1323
2230	1.80						160.0	1.80	1.1476
2235	1.80						134.0	1.80	1.1604
2240	1.81						106.0	1.81	1.1706
2245	1.81						88.0	1.81	1.1790
2250	1.82						77.0	1.82	1.1863
2255	1.83						80.0	1.83	1.1940
2300	1.84						72.0	1.84	1.2078
2315	1.85						57.0	1.85	1.2241
2330	1.89						54.0	1.89	1.2396
2345	1.91						50.0	1.91	1.2540
2400	1.95						55.0	1.95	1.2619
DEC. 10									
0000	1.95						55.0	1.95	1.2698
0015	2.02						77.0	2.02	1.2918
0030	2.02						68.0	2.02	1.3114
0045	2.02						41.0	2.02	1.3231
0100	2.02						30.0	2.02	1.3317
0115	2.02						23.0	2.02	1.3383
0130	2.02						18.0	2.02	1.3435
0145	2.02						15.0	2.02	1.3478
0200	2.02						14.0	2.02	1.3538
0230	2.02						11.0	2.02	1.3601
0300	2.02						9.3	2.02	1.3681
0400	2.02						7.4	2.02	1.3809
0600	2.02						5.3	2.02	1.4052
1200	2.02						3.0	2.02	1.4362
2400	2.02						1.8	2.02	1.4486

STA. NO.	DATE & TIME	TABLE										1972 WATER YEAR	
		SYCAMORE CK TRIR AT INTERSTATE HWY 35-W, FT WORTH, TEX. STORM OF APR. 29, 1972										DISCHARGE	ACCUM.
		G A G E N U M B E R										IN	RUNOFF
		1-ST	2-ST									FT ³ /S	IN.
APR. 29													IN.
0000		0.0	0.0									0.2	0.0001
0100		0.02	0.0									0.2	0.0003
0130		0.05	0.02									2.1	0.0012
0145		0.05	0.02									2.0	0.0016
0150		0.06	0.03									2.0	0.0018
0155		0.15	0.05									4.9	0.0022
0200		0.45	0.07									9.8	0.0032
0205		0.70	0.12									20.0	0.0051
0210		0.77	0.62									190.0	0.0233
0215		0.80	1.00									469.0	0.0680
0220		0.82	1.04									616.0	0.1270
0225		0.84	1.08									615.0	0.1858
0230		0.88	1.12									454.0	0.2292
0235		0.90	1.17									289.0	0.2569
0240		0.92	1.19									160.0	0.2722
0245		0.95	1.20									142.0	0.2857
0250		0.97	1.20									91.0	0.2944
0255		0.97	1.20									78.0	0.3019
0300		0.97	1.20									72.0	0.3088
0305		0.97	1.20									55.0	0.3141
0310		0.97	1.20									49.0	0.3187
0315		0.97	1.20									37.0	0.3258
0330		0.97	1.20									21.0	0.3319
0345		0.97	1.20									14.0	0.3359
0400		0.97	1.20									9.8	0.3401
0430		0.97	1.20									6.8	0.3440
0530		0.97	1.20									5.1	0.3469
0600		0.97	1.20									3.8	0.3491
0700		0.97	1.20									2.9	0.3516
0800		0.97	1.20									2.4	0.3543
0900		0.97	1.20									1.7	0.3563
1000		0.97	1.20									1.4	0.3579
1200		0.97	1.20									1.2	0.3600
1400		0.97	1.20									0.9	0.3620
1600		0.97	1.20									0.4	0.3631
2400		0.97	1.20									0.2	0.3643
												0.2	0.3652









April 29

STA. NO.	TABLE										1972 WATER YEAR		
	STORM RAINFALL AND RUNOFF RECORD												
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF OCT. 19, 1971													
DATE & TIME	2-ST	G A G E				N U M B E R				ACCUM.	DISCHARGE	ACCUM.	
		-				-				WEIGHTED	IN	RUNOFF	
										PRECIP.	FT ³ /S	IN.	
										IN.			
OCT. 19													
0000	0.0									0.0	0.5	0.0003	
0015	0.0									0.0	0.5	0.0006	
0020	0.08									0.08	0.4	0.0007	
0025	0.09									0.09	3.8	0.0020	
0030	0.09									0.09	14.0	0.0068	
0035	0.09									0.09	10.0	0.0102	
0040	0.09									0.09	6.0	0.0122	
0045	0.09									0.09	3.0	0.0132	
0050	0.09									0.09	2.3	0.0140	
0055	0.09									0.09	1.0	0.0144	
0100	0.09									0.09	0.5	0.0145	
0105	0.13									0.13	0.5	0.0147	
0110	0.38									0.38	112.0	0.0528	
0115	0.45									0.45	300.0	0.1547	
0120	0.45									0.45	146.0	0.2179	
0125	0.45									0.45	50.0	0.2344	
0130	0.45									0.45	23.0	0.2505	
0145	0.45									0.45	7.0	0.2553	
0150	0.53									0.53	19.0	0.2617	
0155	0.54									0.54	43.0	0.2764	
0200	0.54									0.54	24.0	0.2927	
0215	0.55									0.55	9.0	0.3014	
0230	0.55									0.55	3.0	0.3049	
0245	0.55									0.55	2.5	0.3075	
0300	0.56									0.56	2.4	0.3136	
0400	0.58									0.58	2.0	0.3197	
0430	0.59									0.59	1.8	0.3234	
0500	0.67									0.67	4.5	0.3364	
0515	0.69									0.69	4.0	0.3445	
0530	0.70									0.70	5.0	0.3479	
0535	0.71									0.71	4.5	0.3494	
0540	0.71									0.71	4.0	0.3508	
0545	0.72									0.72	9.0	0.3539	
0550	0.78									0.78	52.0	0.3715	
0555	0.85									0.85	209.0	0.4426	
0600	0.98									0.98	245.0	0.5258	
0605	1.03									1.03	124.0	0.5679	
0610	1.05									1.05	46.0	0.5972	
0615	1.13									1.13	103.0	0.6342	

STA. NO.	EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX.	TABLE				STORM RAINFALL AND RUNOFF RECORD				1972 WATER YEAR			
		G A G E				PRECIP.				DISCHARGE			
DATE & TIME	2-ST	1	2	3	4	5	6	7	8	9	10	11	12
OCT. 19													
0620	1.15											1.15	120.0
0625	1.17											1.17	125.0
0630	1.19											1.19	71.0
0645	1.22											1.22	23.0
0700	1.26											1.26	22.0
0715	1.28											1.28	17.0
0730	1.31											1.31	18.0
0745	1.33											1.33	17.0
0800	1.37											1.37	20.0
0830	1.48											1.48	23.0
0900	1.54											1.54	36.0
0930	1.57											1.57	2.0
1000	1.57											1.57	1.9
1100	1.57											1.57	1.7
1300	1.57											1.57	1.1
1500	1.57											1.57	0.7
1800	1.57											1.57	0.6
1845	1.57											1.57	0.3
1900	1.57											1.57	0.1
1905	1.57											1.57	0.1
1910	1.57											1.57	0.7
1915	1.52											1.62	4.5
1920	1.72											1.72	17.0
1925	1.64											1.84	83.0
1930	1.92											1.92	170.0
1935	2.12											2.12	250.0
1940	2.52											2.52	350.0
1945	2.71											2.71	357.0
1950	3.12											3.12	415.0
1955	3.64											3.64	442.0
2000	3.69											3.69	557.0
2005	3.60											3.80	505.0
2010	4.02											4.02	510.0
2015	4.22											4.22	520.0
2020	4.42											4.42	517.0
2025	4.50											4.50	462.0
2030	4.50											4.50	413.0
2035	4.50											4.50	245.0
2040	4.50											4.50	292.0

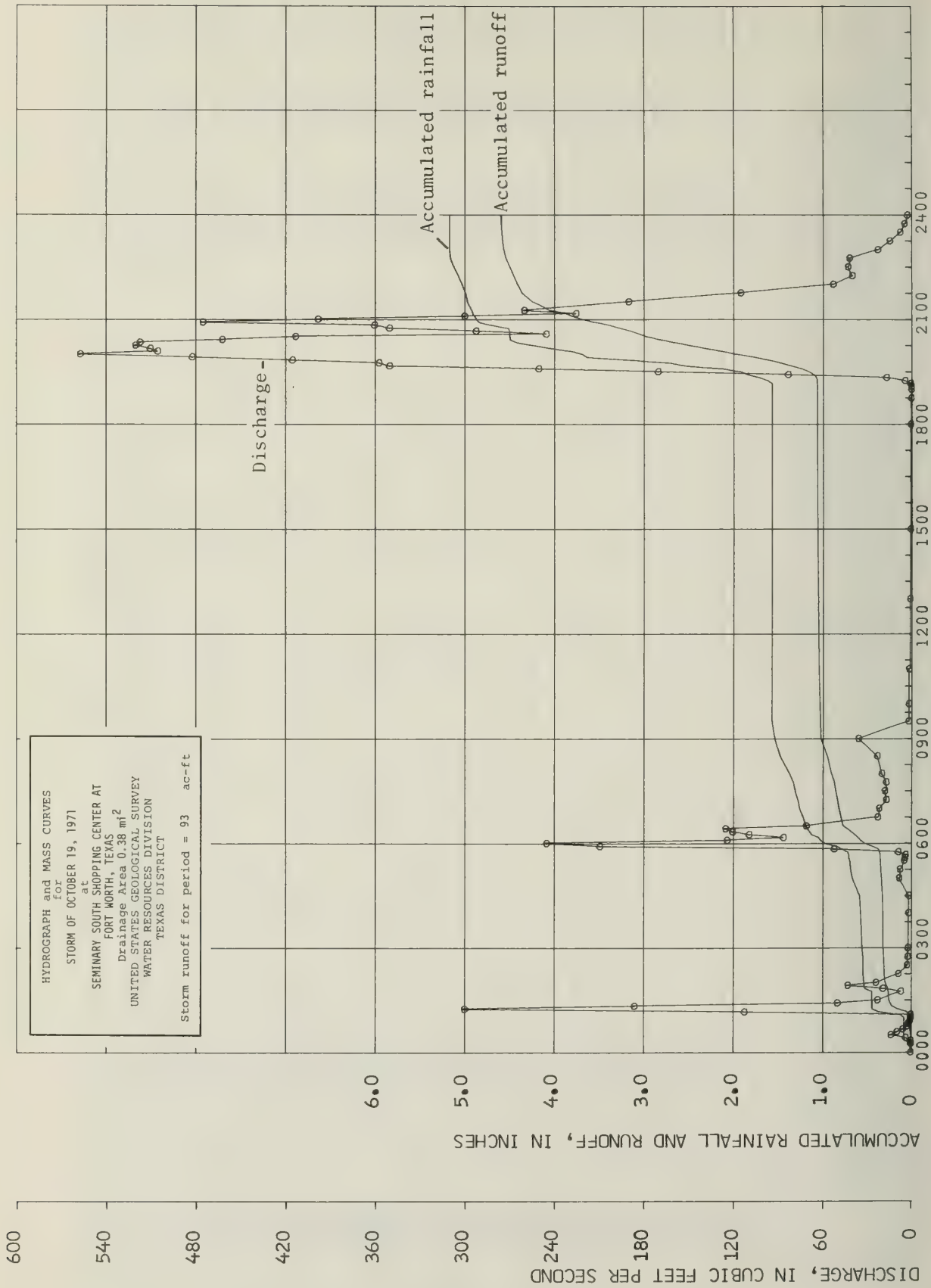
TABLE ----- STORM RAINFALL AND RUNOFF RECORD -----									
STA. NO.	1972 WATER YEAR								
EST. OF RUNOFF FROM S.W. S. SHOP. CENTER, FT WORTH, TEX.	OCT. 19, 1971								
DATE & TIME	2-ST	GAGE	NUM	R	F	P	PRECIP.	WEIGHTED	DISCHARGE
							IN.	IN.	IN.
OCT. 19									
2045	4.51						4.51	350.0	3.2661
2050	4.70						4.70	360.0	3.3884
2055	4.84						4.84	475.0	3.5499
2100	4.87						4.87	398.0	3.6851
2105	4.89						4.89	300.0	3.7871
2110	4.91						4.91	225.0	3.8635
2115	4.92						4.92	260.0	4.0402
2130	4.97						4.97	190.0	4.2339
2145	4.99						4.99	115.0	4.3512
2200	5.03						5.03	53.0	4.4052
2215	5.07						5.07	40.0	4.4460
2230	5.12						5.12	43.0	4.4898
2245	5.16						5.16	42.0	4.5326
2300	5.17						5.17	23.0	4.5561
2315	5.17						5.17	15.0	4.5714
2330	5.17						5.17	8.0	4.5795
2345	5.17						5.17	5.0	4.5846
2400	5.17						5.17	3.0	4.5861

STATION NO. 1972 WATER YEAR									
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF DEC. 8, 1971									
DATE & TIME									
PRECIP. IN. FT ³ /S IN. ACCUM. W/UGHTED IN DISCHARGE IN									
2-ST									
DEC. 8									
0000	0.0						0.0	0.0	0.0011
1100	0.0						0.0	0.0	0.0023
1115	0.0						0.0	0.0	0.0023
1130	0.05						0.05	2.2	0.0079
1230	0.05						0.05	1.5	0.0117
1245	0.15						0.15	1.8	0.0136
1300	0.16						0.16	13.0	0.0268
1315	0.30						0.30	11.0	0.0381
1330	0.43						0.43	156.0	0.1971
1345	0.43						0.43	27.0	0.2246
1400	0.43						0.43	7.0	0.2353
1430	0.43						0.43	3.0	0.2414
1500	0.43						0.43	2.0	0.2455
1530	0.43						0.43	1.5	0.2478
1545	0.45						0.45	1.0	0.2488
1600	0.47						0.47	5.0	0.2565
1630	0.54						0.54	4.0	0.2626
1645	0.52						0.52	14.0	0.2769
1700	0.67						0.67	62.0	0.3190
1705	0.69						0.69	77.0	0.3452
1710	0.69						0.69	59.0	0.3652
1715	0.69						0.69	61.0	0.3859
1720	0.69						0.69	42.0	0.4002
1725	0.69						0.69	23.0	0.4080
1730	0.74						0.74	21.0	0.4152
1735	0.75						0.75	20.0	0.4220
1740	0.76						0.76	34.0	0.4335
1745	0.77						0.77	30.0	0.4437
1750	0.90						0.90	24.0	0.4519
1755	1.00						1.00	46.0	0.4675
1800	1.04						1.04	140.0	0.5151
1805	1.05						1.05	147.0	0.5650
1810	1.20						1.20	116.0	0.6044
1815	1.21						1.21	127.0	0.6476
1820	1.21						1.21	152.0	0.6993
1825	1.23						1.23	139.0	0.7465
1830	1.23						1.23	78.0	0.7730
1835	1.23						1.23	71.0	0.7971
1840	1.23						1.23	92.0	0.8284

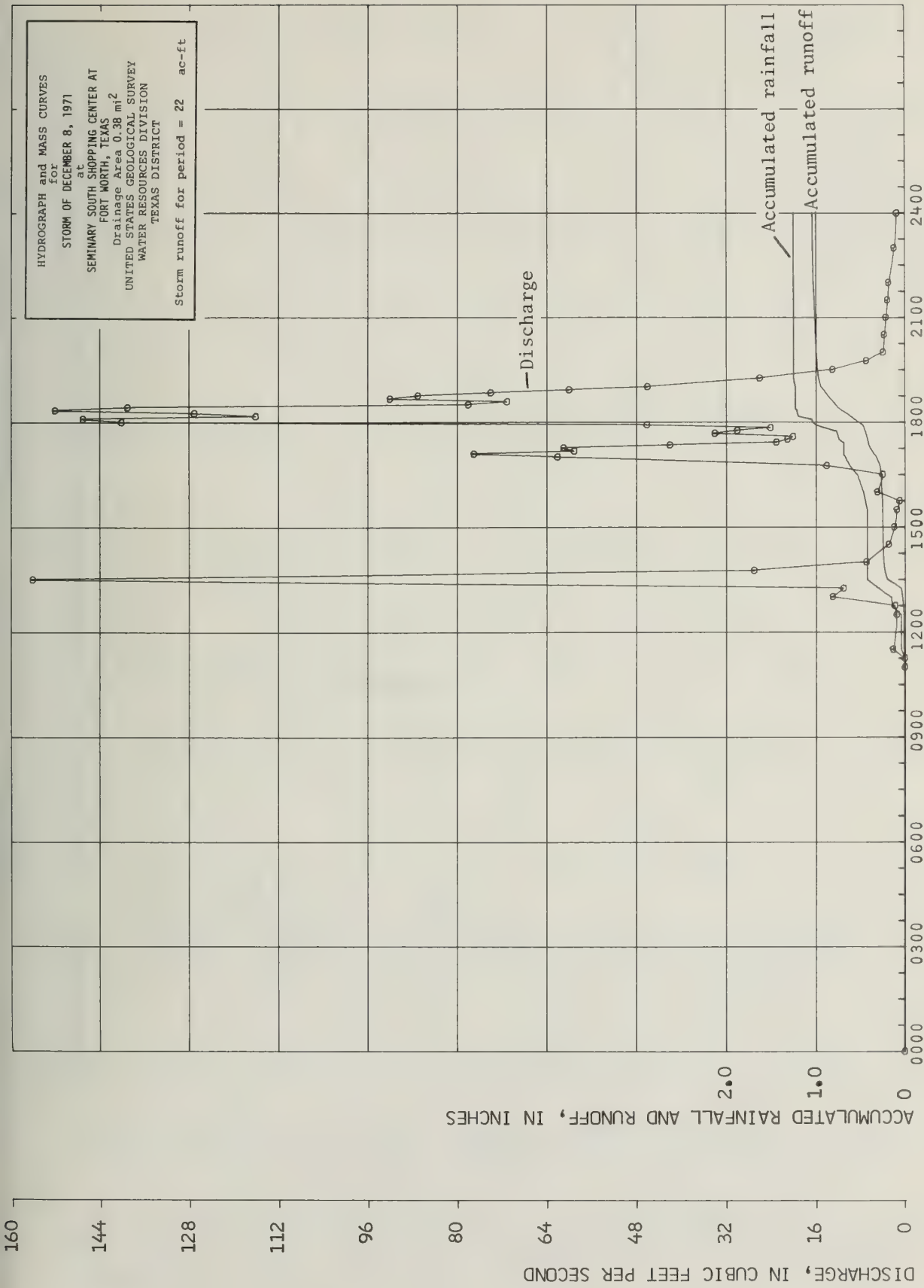
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
STA. NO.	EST OF RUNOFF FROM SEM S SHOP CENTER FT WORTH TEX				DISCHARGE				
PRECIP.									
IN.									
ACCUM.									
IN.									
FT ³ /S									
IN.									
1971									
DEC 9-10									
PRECIP.									
IN.									
FT ³ /S									
IN.									
ACCUM.									
IN.									
FT ³ /S									
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ACCUM.									
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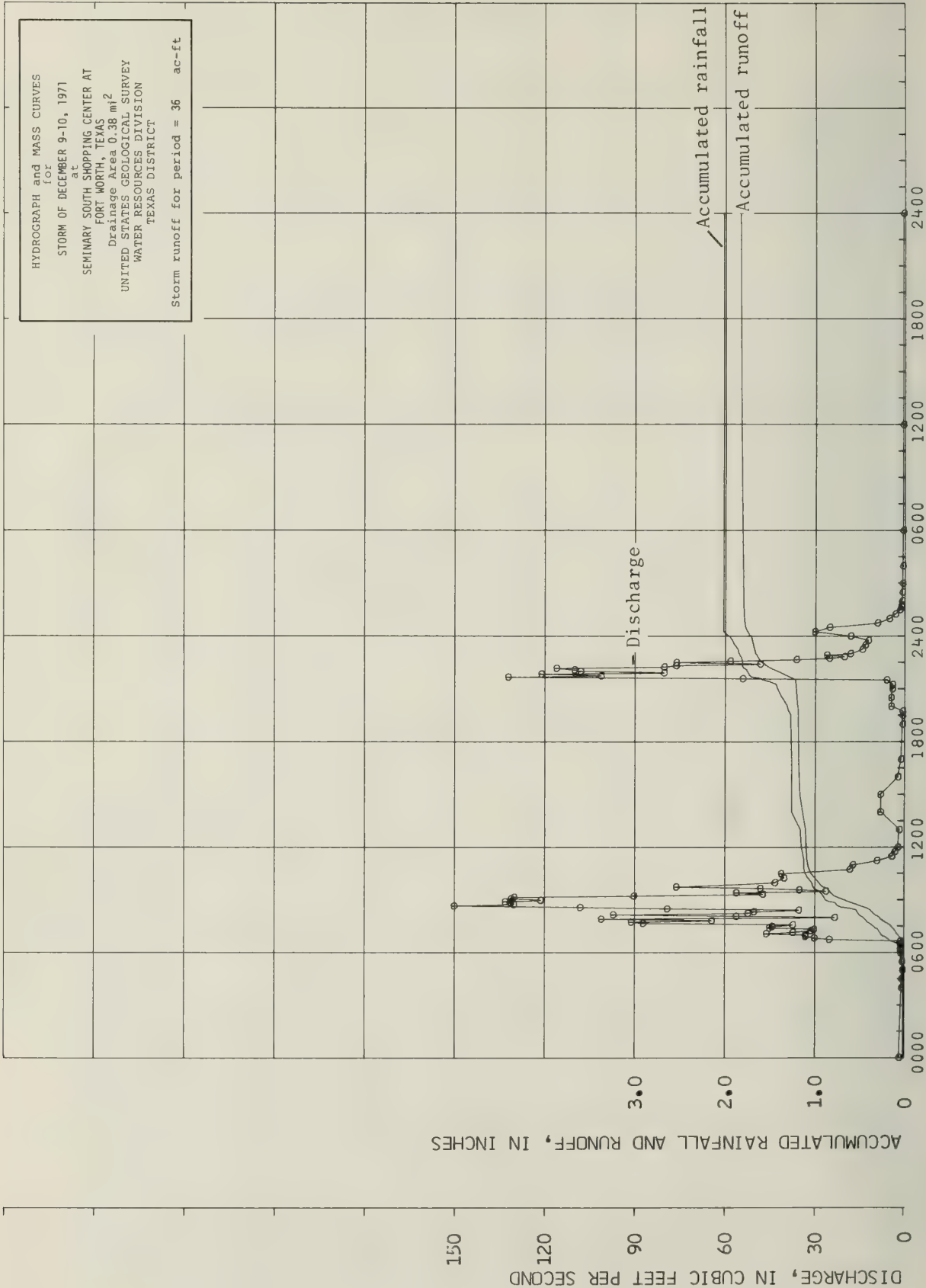
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
STA. NO.	EST OF RUNOFF FROM SEM S SHOP CENTER FT NORTH				STORM OF DEC 9-10 1971				1972 WATER YEAR
DATE & TIME	2-ST	GAGE	NUM	R	PRECIP.	ACCUM.	DISCHARGE	IN	FT3/S
					IN.				IN.
DEC. 9									
2225	1.40				1.80			48.0	1.5668
2230	1.40				1.80			76.0	1.5927
2235	1.40				1.80			58.0	1.5124
2240	1.41				1.81			36.0	1.6246
2245	1.41				1.81			25.0	1.6331
2250	1.42				1.82			20.0	1.6399
2255	1.43				1.83			26.0	1.6447
2300	1.44				1.84			18.0	1.6610
2315	1.45				1.85			14.0	1.6752
2330	1.49				1.89			13.0	1.6845
2345	1.1				1.91			12.0	1.7007
2400	1.95				1.95			18.0	1.7099
DEC. 10									
0000	1.95				1.95			18.0	1.7191
0015	2.02				2.02			30.0	1.7496
0030	2.02				2.02			25.0	1.7751
0045	2.02				2.02			9.0	1.7843
0100	2.02				2.02			5.0	1.7894
0115	2.02				2.02			3.0	1.7925
0130	2.02				2.02			1.5	1.7940
0145	2.02				2.02			1.0	1.7950
0200	2.02				2.02			0.8	1.7962
0230	2.02				2.02			0.7	1.7977
0300	2.02				2.02			0.6	1.7995
0400	2.02				2.02			0.5	1.8025
0600	2.02				2.02			0.4	1.8091
1200	2.02				2.02			0.4	1.8218
2400	2.02				2.02			0.4	1.8315

STATION NO. 1972 WATER YEAR									
TABLE 1972 WATER YEAR									
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT. WORTH, TEX. STORM OF APR. 29, 1972									
DATE & TIME 2-ST 1 2 3 4 5 6 7 8 9 10									
PRECIP. IN. FT ³ /S IN. ACCUM. WEIGHTED PRECIP. IN. DISCHARGE IN. ACCUM. RUNOFF									
APR. 29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0130	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0145	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0150	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0155	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0200	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
0205	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
0210	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
0215	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0220	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
0225	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
0230	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
0235	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
0240	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
0245	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0250	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0255	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0300	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0305	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0310	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0315	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0330	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0345	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0400	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0430	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0500	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0530	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0600	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0700	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
0800	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
1000	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
1200	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
1400	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
1600	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
2400	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20



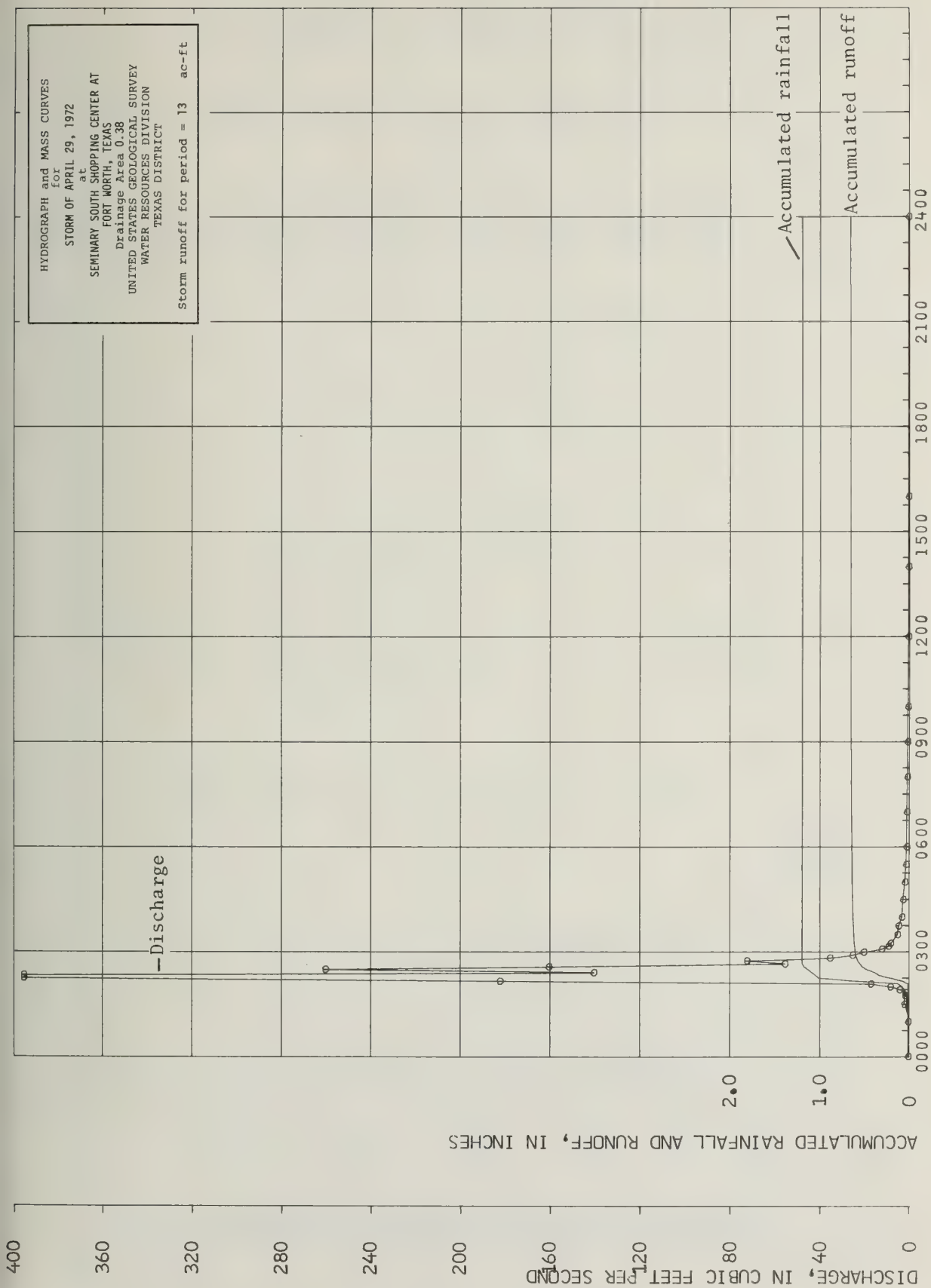
October 19





HYDROGRAPH and MASS CURVES
for
STORM OF APRIL 29, 1972
at
SEMINARY SOUTH SHOPPING CENTER AT
FORT WORTH, TEXAS
Drainage Area 0.38
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 13 ac-ft



April 29

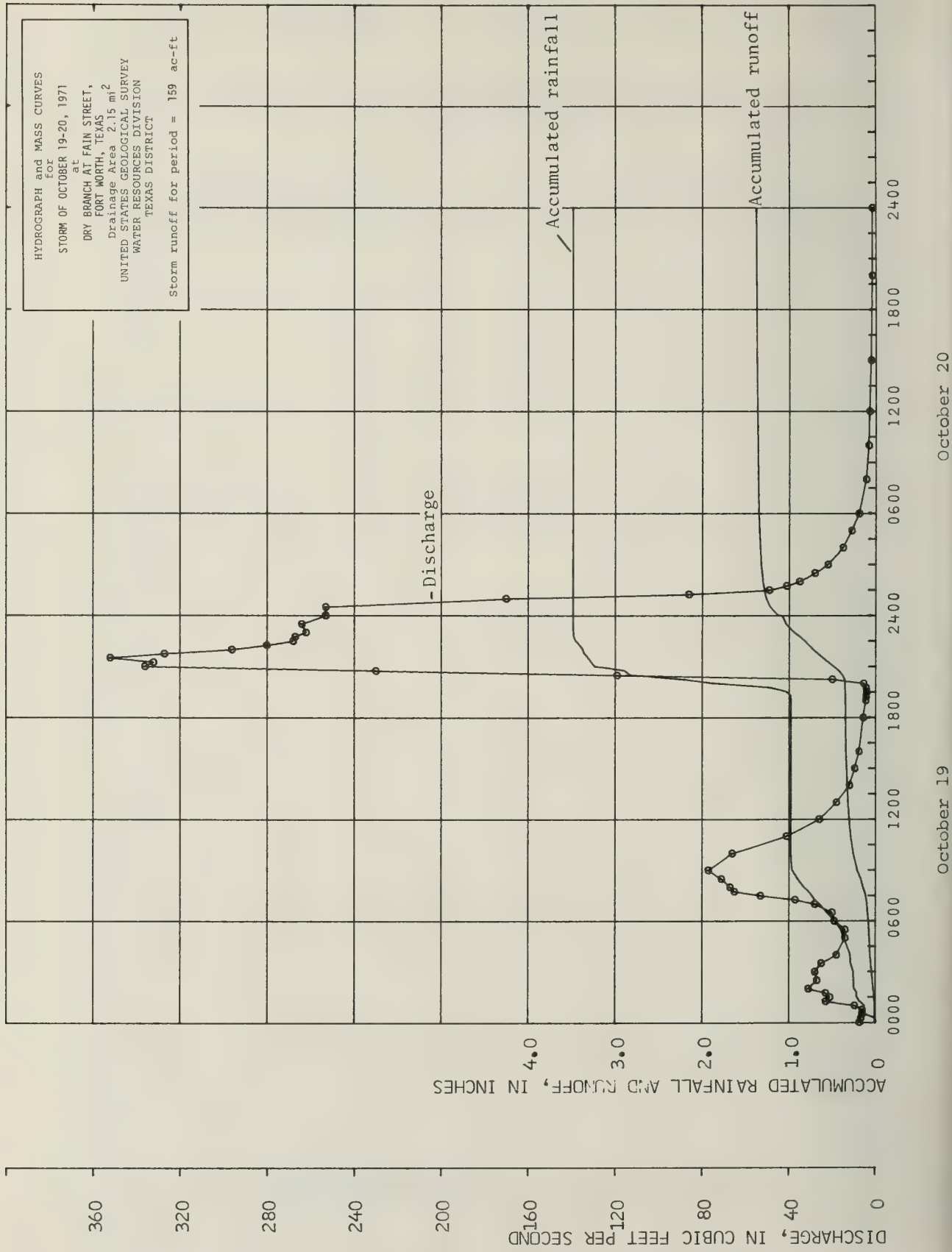
STA. NO. 0P064600		TABLE										1972 WATER YEAR	
DRY BRANCH AT FAIR STREET, FORT WORTH, TEX.		--- STORM RAINFALL AND RUNOFF RECORD											
		STORM OF OCT. 19-20, 1971											
DATE & TIME		G A G F N U M B E R											
		1-DR	2-DR									DISCHARGE IN FT ³ /S	ACCUM. IN PRECIP. IN.
OCT 19													
0000		0.0	0.0									7.3	0.0007
0015		0.0	0.0									6.6	0.0018
0030		0.11	0.15									6.0	0.0029
0045		0.11	0.15									6.0	0.0040
0100		0.11	0.15									9.6	0.0057
0115		0.13	0.24									23.0	0.0099
0130		0.18	0.25									21.0	0.0137
0145		0.18	0.25									23.0	0.0178
0200		0.19	0.30									31.0	0.0262
0230		0.20	0.30									27.0	0.0359
0300		0.20	0.31									28.0	0.0460
0330		0.23	0.34									25.0	0.0550
0400		0.23	0.35									18.0	0.0647
0500		0.31	0.42									14.0	0.0723
0530		0.34	0.46									14.0	0.0774
0600		0.43	0.52									19.0	0.0842
0630		0.54	0.59									20.0	0.0914
0700		0.62	0.68									28.0	0.0990
0715		0.67	0.74									37.0	0.1057
0730		0.71	0.76									53.0	0.1152
0745		0.75	0.80									65.0	0.1269
0800		0.71	0.85									67.0	0.1450
0830		0.87	0.93									71.0	0.1706
0900		0.93	0.99									77.0	0.2122
1000		0.95	1.00									66.0	0.2598
1100		0.95	1.00									41.0	0.2893
1200		0.95	1.00									26.0	0.3041
1300		0.95	1.00									18.0	0.3211
1400		0.95	1.00									12.0	0.3297
1500		0.95	1.00									9.6	0.3366
1600		0.95	1.00									7.6	0.3448
1800		0.95	1.00									5.7	0.3510
1900		0.95	1.00									4.5	0.3530
1915		0.96	1.00									4.3	0.3538
1930		1.03	1.02									4.1	0.3545
1945		1.17	1.27									4.3	0.3553
2000		1.88	1.87									5.4	0.3563
2015		2.11	2.40									20.0	0.3599
2030		2.56	3.08									119.0	0.3813

TABLE 08048600 STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048600									
DRY BRANCH AT FAIR STREET, FORT WORTH, TEX.									
DATE & TIME									
1-DR 2-DR									
G A G E N U M B E R									
STORM OF OCT. 19-20, 1971									
ACCUM. DISCHARGE IN ACCUM. IN. IN.									
PRECIP. FT3/S									
1972 WATER YEAR									
OCT 19									
2045	2.65	3.13					2.89	230.0	0.4228
2100	2.97	3.50					3.23	336.0	0.4833
2115	3.00	3.55					3.27	332.0	0.5431
2130	3.04	3.58					3.31	352.0	0.6066
2145	3.09	3.62					3.35	327.0	0.6655
2200	3.11	3.63					3.37	296.0	0.7188
2215	3.14	3.68					3.41	280.0	0.7693
2230	3.18	3.73					3.45	268.0	0.8176
2245	3.20	3.75					3.47	267.0	0.8657
2300	3.21	3.75					3.48	262.0	0.9365
2330	3.22	3.75					3.48	264.0	1.0316
2400	3.22	3.75					3.48	253.0	1.0772
OCT 20									
0000	3.22	3.75					3.48	253.0	1.1228
0030	3.22	3.75					3.48	253.0	1.2140
0100	3.22	3.75					3.48	170.0	1.2599
0115	3.22	3.75					3.48	86.0	1.2754
0130	3.22	3.75					3.48	49.0	1.2842
0145	3.22	3.75					3.48	41.0	1.2916
0200	3.22	3.75					3.48	35.0	1.3011
0230	3.22	3.75					3.48	28.0	1.3112
0300	3.22	3.75					3.48	22.0	1.3231
0400	3.22	3.75					3.48	15.0	1.3339
0500	3.22	3.75					3.48	11.0	1.3418
0600	3.22	3.75					3.48	7.6	1.3500
0800	3.22	3.75					3.48	4.3	1.3562
1000	3.22	3.75					3.48	3.2	1.3608
1200	3.22	3.75					3.48	2.8	1.3659
1500	3.22	3.75					3.48	2.2	1.3722
2000	3.22	3.75					3.48	1.7	1.3777
2400	3.22	3.75					3.48	1.6	1.3800

STA. NO. 08044500		TABLE										1972 WATER YEAR									
DAY BRANCH AT FAIRM STREET, FORT WORTH, TEX.		STORM RAINFALL AND RUNOFF RECORD																			
DATE & TIME		1-DM		2-DM		6 AGF		NU-M-R-F-R		STORM OF DEC. 2, 1971		WEIGHTED PRECIP. IN.		DISCHARGE IN		ACCUM. RUNOFF					
DEC. 2																					
0000		0.0		0.0								0.0		0.2		0.0002					
0200		0.0		0.0								0.0		0.2		0.0004					
0300		0.03		0.01								0.02		0.2		0.0005					
0330		0.05		0.04								0.04		0.2		0.0006					
0400		0.06		0.05								0.05		0.2		0.0007					
0430		0.07		0.05								0.06		1.1		0.0011					
0500		0.08		0.10								0.09		1.1		0.0015					
0530		0.14		0.13								0.13		1.9		0.0022					
0600		0.16		0.15								0.15		3.4		0.0034					
0630		0.16		0.15								0.15		4.1		0.0049					
0700		0.16		0.15								0.15		5.4		0.0068					
0730		0.19		0.15								0.17		5.7		0.0089					
0800		0.19		0.15								0.17		5.7		0.0109					
0830		0.23		0.21								0.22		5.7		0.0130					
0900		0.28		0.22								0.28		7.6		0.0157					
0930		0.33		0.30								0.31		8.8		0.0189					
1000		0.37		0.33								0.35		13.0		0.0224					
1015		0.34		0.33								0.35		13.0		0.0247					
1030		0.34		0.34								0.36		13.0		0.0271					
1045		0.56		0.49								0.52		15.0		0.0298					
1100		0.67		0.68								0.67		42.0		0.0373					
1115		0.74		0.73								0.73		61.0		0.0483					
1130		0.0		0.82								0.81		77.0		0.0622					
1145		0.85		0.84								0.84		92.0		0.0770					
1200		0.93		0.92								0.92		93.0		0.0937					
1215		0.98		0.96								0.97		101.0		0.1119					
1230		1.06		1.05								1.05		104.0		0.1307					
1245		1.13		1.08								1.10		111.0		0.1507					
1300		1.20		1.15								1.17		113.0		0.1710					
1315		1.32		1.24								1.30		120.0		0.1927					
1330		1.42		1.37								1.34		132.0		0.2164					
1345		1.46		1.42								1.44		140.0		0.2417					
1400		1.49		1.46								1.47		144.0		0.2676					
1415		1.54		1.50								1.52		147.0		0.2941					
1430		1.58		1.55								1.56		148.0		0.3202					
1445		1.59		1.55								1.57		152.0		0.3482					
1500		1.60		1.55								1.57		148.0		0.3748					
1515		1.60		1.55								1.57		139.0		0.3999					
1530		1.60		1.55								1.57		129.0		0.4231					

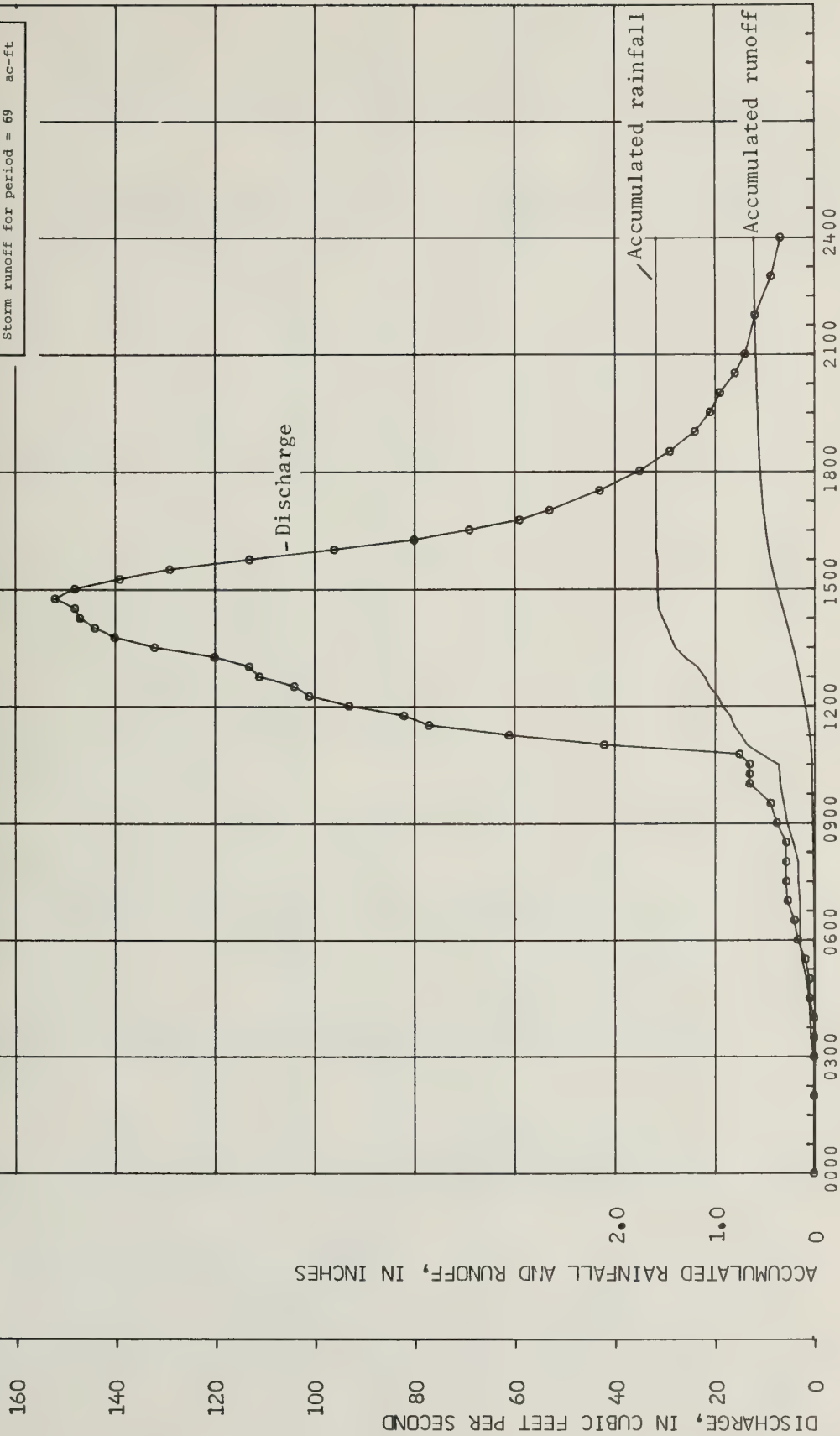
STATION 04044600									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
DRY BRANCH AT FAIR STREET, FORT WORTH, TEX.									
STORM OF DEC. 2, 1971									
GAGE NUMBER									
DATE & TIME									
1-DR 2-DR									
ACCUM. WEIGHTED PRECIP. IN.									
DISCHARGE IN FT ³ /S									
ACCUM. RUNOFF IN.									
1972 WATER YEAR									
DEC. 2									
1545	1.60	1.55						113.0	0.4435
1600	1.60	1.58						96.0	0.4608
1615	1.60	1.58						80.0	0.4752
1630	1.60	1.58						69.0	0.4876
1645	1.60	1.58						59.0	0.4983
1700	1.60	1.58						53.0	0.5126
1730	1.60	1.58						43.0	0.5281
1800	1.60	1.58						35.0	0.5407
1830	1.60	1.58						29.0	0.5511
1900	1.60	1.58						24.0	0.5598
1930	1.60	1.58						21.0	0.5674
2000	1.60	1.58						19.0	0.5742
2030	1.60	1.58						16.0	0.5800
2100	1.60	1.58						14.0	0.5875
2200	1.60	1.58						12.0	0.5962
2300	1.60	1.58						8.8	0.6025
2400	1.60	1.58						6.9	0.6050

STATION 08048600									
TABLE									
DAY BRANCH AT FAIR STAFF, FORT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
DATE & TIME									
GAGE NUMBER									
STORM OF DEC. 9-10, 1971									
PRECIP. IN.									
ACCUM. WEIGHTED									
DISCHARGE IN									
FT ³ /S									
IN.									
ACCUM. RUNOFF									
IN.									
DEC. 9									
1930	1.45	1.84					1.66	20.0	1.0168
2000	1.49	1.90					1.69	18.0	1.0233
2030	1.64	1.94					1.81	22.0	1.0312
2100	1.65	2.01					1.83	36.0	1.0410
2115	1.68	2.02					1.85	40.0	1.0442
2130	1.75	2.23					2.09	44.0	1.0561
2145	2.14	2.42					2.28	93.0	1.0729
2200	2.16	2.50					2.33	122.0	1.0949
2215	2.19	2.54					2.36	129.0	1.1181
2230	2.20	2.55					2.37	136.0	1.1426
2245	2.22	2.58					2.40	147.0	1.1691
2300	2.25	2.58					2.41	152.0	1.1945
2315	2.26	2.54					2.42	156.0	1.2246
2330	2.28	2.53					2.43	155.0	1.2525
2345	2.32	2.64					2.44	148.0	1.2792
2400	2.38	2.64					2.53	136.0	1.2914
DEC. 10									
0000	2.38	2.64					2.53	136.0	1.3037
0015	2.38	2.71					2.54	125.0	1.3262
0030	2.38	2.71					2.54	112.0	1.3464
0045	2.38	2.71					2.54	101.0	1.3646
0100	2.39	2.71					2.55	93.0	1.3897
0130	2.40	2.71					2.55	77.0	1.4175
0200	2.41	2.71					2.56	63.0	1.4402
0230	2.41	2.71					2.56	52.0	1.4589
0300	2.41	2.71					2.56	45.0	1.4751
0330	2.41	2.71					2.56	39.0	1.4892
0400	2.41	2.71					2.56	34.0	1.5076
0500	2.41	2.71					2.56	28.0	1.5277
0600	2.41	2.71					2.56	22.0	1.5515
0700	2.41	2.71					2.56	15.0	1.5731
1000	2.41	2.71					2.56	12.0	1.5904
1200	2.41	2.71					2.56	8.0	1.6020
1400	2.41	2.71					2.56	5.7	1.6143
1800	2.41	2.71					2.56	3.8	1.6240
2400	2.41	2.71					2.56	2.6	1.6336

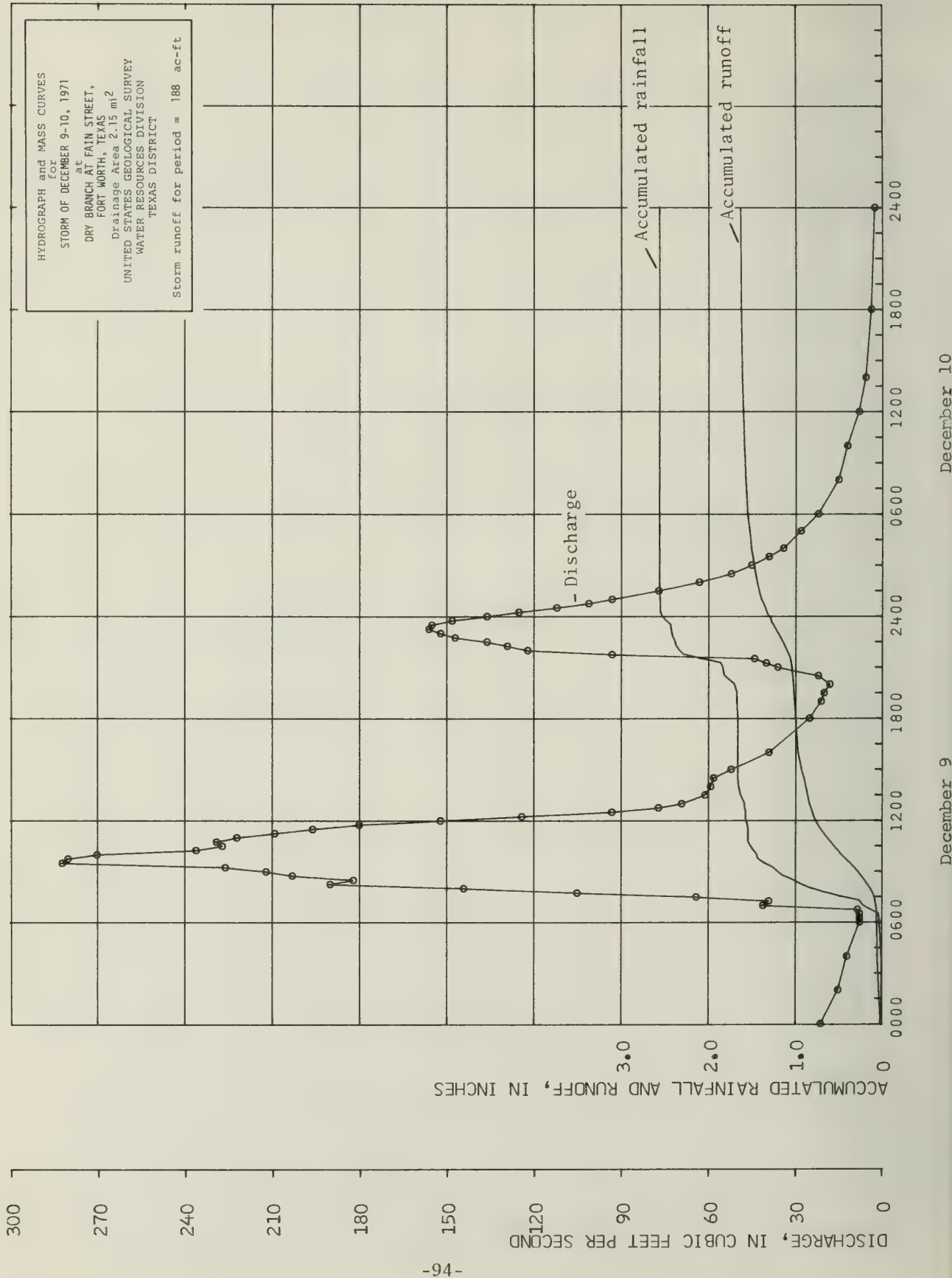


HYDROGRAPH and MASS CURVES
for
STORM OF DECEMBER 2, 1971
at
DRY BRANCH AT FAIN STREET,
FORT WORTH, TEXAS
Drainage Area 2.15 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 69 ac-ft



December 2



STA. NO. 04048850									
TABLE									
----- STORM RAINFALL AND RUNOFF RECORD -----									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF OCT. 19-20, 1971									
DATE & TIME	G A G F N U M B E R					PRECIP.	ACCUM.	DISCHARGE	
	1-LF	2-LF	3-LF					IN	FT ³ /S
OCT. 19									
0000	0.0	0.0	0.0				0.0	8.2	0.0001
0015	0.0	0.0	0.0				0.0	7.7	0.0004
0030	0.29	0.02	0.0				0.10	7.3	0.0006
0045	0.40	0.11	0.13				0.22	11.0	0.0009
0100	0.40	0.11	0.14				0.22	10.0	0.0013
0115	0.40	0.11	0.14				0.22	8.7	0.0017
0145	0.40	0.14	0.15				0.23	8.7	0.0021
0200	0.40	0.14	0.14				0.24	8.7	0.0028
0300	0.41	0.15	0.20				0.26	8.7	0.0036
0330	0.45	0.20	0.21				0.30	8.7	0.0041
0400	0.49	0.22	0.26				0.33	8.7	0.0048
0445	0.51	0.24	0.27				0.34	8.7	0.0054
0500	0.55	0.25	0.30				0.37	9.2	0.0061
0600	0.62	0.30	0.37				0.44	12.0	0.0070
0615	0.66	0.32	0.43				0.48	12.0	0.0074
0630	0.69	0.36	0.45				0.51	14.0	0.0079
0645	0.71	0.38	0.56				0.57	17.0	0.0084
0700	0.70	0.41	0.62				0.63	17.0	0.0092
0730	0.71	0.52	0.72				0.73	22.0	0.0106
0800	1.00	0.65	0.80				0.83	27.0	0.0123
0830	1.05	0.72	0.86				0.89	31.0	0.0142
0900	1.09	0.79	0.94				0.95	40.0	0.0168
0930	1.09	0.80	0.95				0.96	48.0	0.0198
1000	1.13	0.81	0.95				0.98	54.0	0.0232
1030	1.13	0.81	0.96				0.98	56.0	0.0267
1100	1.13	0.81	0.96				0.98	56.0	0.0294
1115	1.13	0.81	0.96				0.98	51.0	0.0310
1130	1.13	0.81	0.95				0.98	48.0	0.0332
1200	1.13	0.81	0.94				0.98	40.0	0.0370
1300	1.13	0.81	0.94				0.98	36.0	0.0415
1400	1.13	0.81	0.96				0.98	32.0	0.0456
1500	1.13	0.81	0.94				0.98	31.0	0.0480
1515	1.13	0.81	0.94				0.98	31.0	0.0490
1530	1.18	0.83	0.96				1.00	31.0	0.0500
1545	1.20	0.83	0.95				1.01	31.0	0.0509
1600	1.26	0.83	0.96				1.01	31.0	0.0553
1600	1.26	0.83	0.96				1.01	24.0	0.0559
1600	1.26	0.83	0.95				1.01	19.0	0.0614
1615	1.26	0.83	0.95				1.01	18.0	0.0619

STATION NO. 34068851									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF OCT. 19-20, 1971									
DATE & TIME	G A G E				ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE		1972 WATER YEAR	
	1-LF	2-LF	3-LF			IN	FT ³ /S	IN	RUNOFF
OCT. 19									
1930	1.21	0.85	0.97		1.02	18.0			0.0625
1945	1.27	0.89	1.02		1.07	18.0			0.0631
2000	1.38	1.04	1.12		1.19	30.0			0.0640
2015	1.47	1.15	1.59		1.44	95.0			0.0670
2030	1.59	1.37	2.06		1.73	363.0			0.0784
2045	1.69	1.52	2.72		2.07	872.0			0.1059
2100	1.98	1.81	2.77		2.26	1000.0			0.1374
2115	2.01	1.83	3.03		2.34	1200.0			0.1752
2130	2.07	1.88	3.06		2.43	1280.0			0.2155
2145	2.11	1.90	3.10		2.46	1410.0			0.2599
2200	2.12	1.94	3.15		2.50	1520.0			0.3078
2215	2.13	1.96	3.17		2.51	1440.0			0.3544
2230	2.17	1.98	3.19		2.54	1400.0			0.3945
2245	2.20	2.00	3.24		2.54	1320.0			0.4401
2300	2.21	2.02	3.26		2.59	1210.0			0.4722
2315	2.21	2.02	3.26		2.54	1060.0			0.5116
2330	2.22	2.03	3.27		2.60	876.0			0.5392
2345	2.22	2.04	3.27		2.61	724.0			0.5620
2400	2.22	2.04	3.27		2.61	609.0			0.5716
OCT. 20									
0000	2.22	2.04	3.27		2.61	609.0			0.5811
0015	2.22	2.04	3.27		2.61	536.0			0.5980
0030	2.22	2.04	3.27		2.61	479.0			0.6131
0045	2.22	2.04	3.27		2.61	425.0			0.6266
0100	2.22	2.04	3.27		2.61	388.0			0.6449
0130	2.22	2.04	3.27		2.61	316.0			0.6648
0200	2.22	2.04	3.27		2.61	263.0			0.6808
0230	2.22	2.04	3.27		2.61	209.0			0.6939
0400	2.22	2.04	3.27		2.61	176.0			0.7050
0330	2.22	2.04	3.27		2.61	153.0			0.7147
0400	2.22	2.04	3.27		2.61	132.0			0.7271
0500	2.22	2.04	3.27		2.61	95.0			0.7391
0600	2.22	2.04	3.27		2.61	78.0			0.7489
0700	2.22	2.04	3.27		2.61	68.0			0.7575
0800	2.22	2.04	3.27		2.61	57.0			0.7647
0900	2.22	2.04	3.27		2.61	50.0			0.7710
1000	2.22	2.04	3.27		2.61	40.0			0.7785
1100	2.22	2.04	3.27		2.61	30.0			0.7861
1400	2.22	2.04	3.27		2.61	23.0			0.7919
1500	2.22	2.04	3.27		2.61	18.0			0.7964

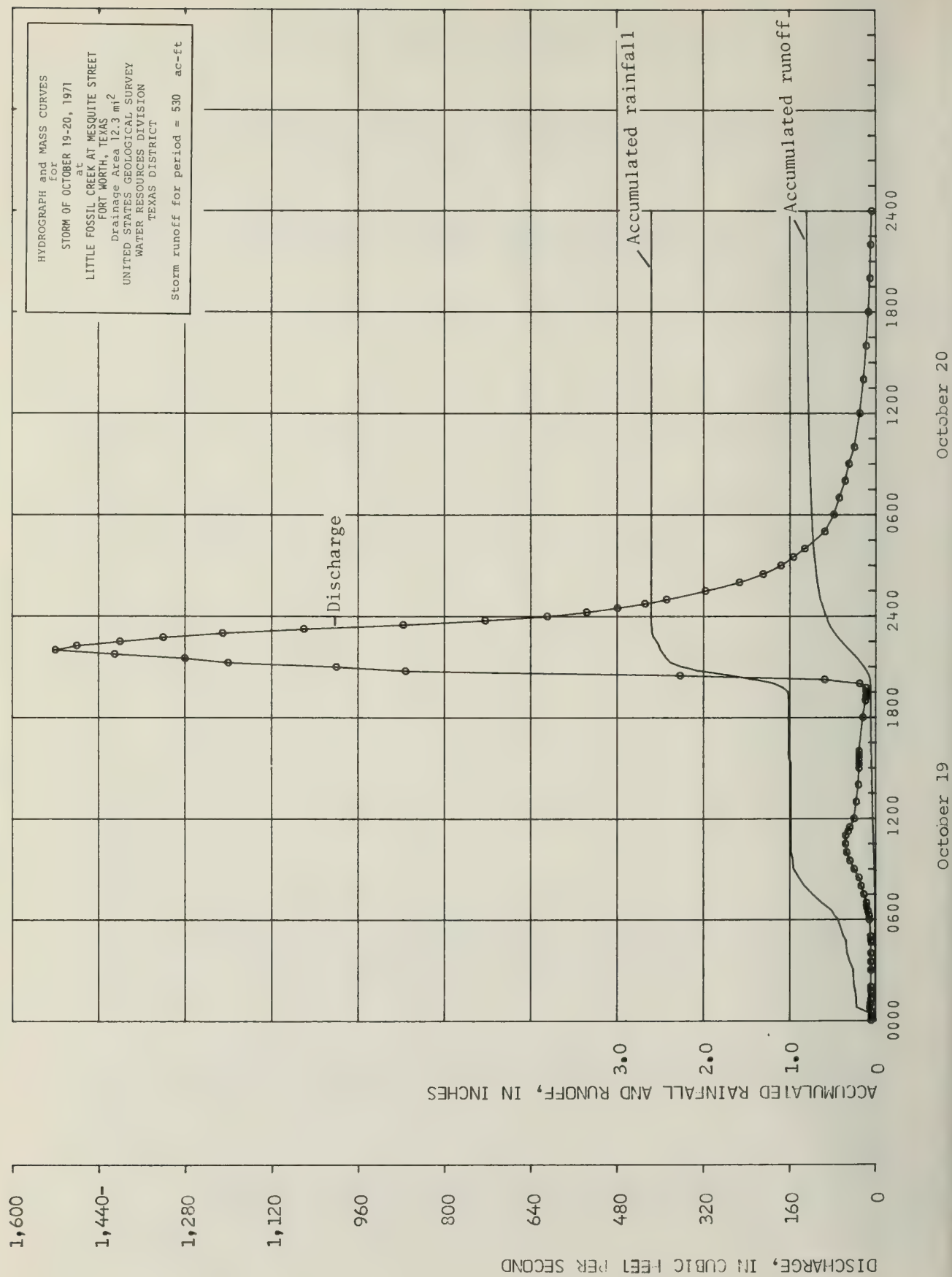
TABLE									
STATION 08042250									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
DATE & TIME									
OCT. 20									
1-LE									
2-LE									
3-LE									
G A G F									
N I M B E R									
OCT. 19-20, 1971									
ACCUM. WEIGHTED PRECIP. IN.									
DISCHARGE IN									
FT ³ /S									
IN.									
ACCUM. RUNOFF									
IN.									
1500	2.22	2.04	3.27				2.61	14.0	0.7999
2000	2.22	2.04	3.27				2.61	11.0	0.8027
2200	2.22	2.04	3.27				2.61	9.7	0.8052
2400	2.22	2.04	3.27				2.61	7.7	0.8061

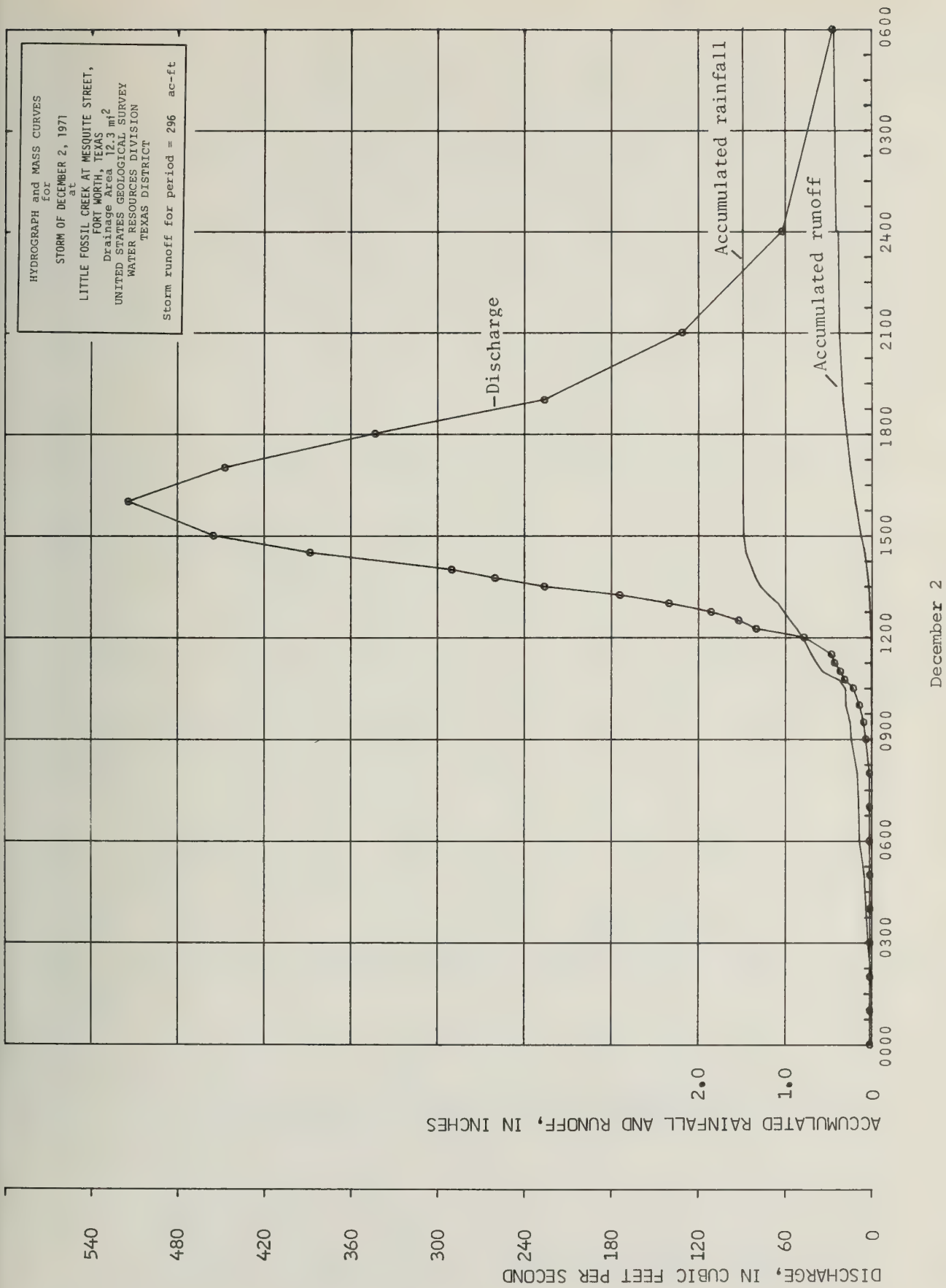
TABLE STATION NO. 08048850									
STORM RAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF DEC. 2 • 1971									
DATE & TIME	1-IF	2-LF	3-LF	GAGE	NUMBER	PRECIP. IN.	FT ³ /S	DISCHARGE IN	1972 WATER YEAR ACCUM. RUNOFF
DEC. 2									
0000	0.0	0.0	0.0			0.0		1.4	0.0001
0100	0.0	0.0	0.0			0.0		1.4	0.0003
0200	0.0	0.0	0.03			0.01		1.4	0.0004
0300	0.05	0.04	0.05			0.05		1.4	0.0006
0400	0.08	0.06	0.07			0.07		1.4	0.0008
0500	0.09	0.04	0.10			0.09		1.4	0.0010
0600	0.12	0.11	0.17			0.15		1.6	0.0012
0700	0.13	0.15	0.18			0.16		1.6	0.0014
0800	0.15	0.16	0.20			0.17		1.6	0.0016
0900	0.21	0.24	0.27			0.24		4.2	0.0020
0930	0.23	0.25	0.28			0.26		5.7	0.0023
1000	0.26	0.31	0.34			0.31		8.7	0.0029
1030	0.27	0.31	0.35			0.31		13.0	0.0035
1045	0.45	0.31	0.37			0.38		19.0	0.0041
1100	0.55	0.52	0.62			0.57		22.0	0.0048
1115	0.61	0.58	0.70			0.64		26.0	0.0056
1130	0.66	0.63	0.77			0.70		28.0	0.0069
1200	0.76	0.71	0.89			0.80		47.0	0.0091
1215	0.82	0.77	0.96			0.86		80.0	0.0117
1230	0.89	0.86	1.03			0.94		92.0	0.0146
1245	0.97	0.94	1.09			1.01		111.0	0.0141
1300	1.05	1.00	1.15			1.08		140.0	0.0225
1315	1.15	1.10	1.27			1.19		174.0	0.0279
1330	1.22	1.20	1.38			1.28		226.0	0.0351
1345	1.27	1.23	1.46			1.34		260.0	0.0433
1400	1.31	1.27	1.50			1.38		290.0	0.0570
1430	1.37	1.35	1.59			1.46		388.0	0.0814
1500	1.39	1.38	1.62			1.48		455.0	0.1244
1600	1.40	1.39	1.62			1.49		514.0	0.1891
1700	1.40	1.39	1.62			1.49		447.0	0.2455
1800	1.40	1.34	1.62			1.49		343.0	0.2887
1900	1.40	1.39	1.62			1.44		226.0	0.3314
2100	1.40	1.39	1.62			1.49		131.0	0.3726
2400	1.40	1.39	1.62			1.49		52.0	0.3844
DEC. 3									
0000	1.40	1.39	1.62			1.49		62.0	0.4078
0600	1.40	1.39	1.62			1.49		27.0	0.4282
1200	1.40	1.39	1.62			1.49		16.0	0.4403
1800	1.40	1.39	1.62			1.49		10.0	0.4478
2400	1.40	1.39	1.62			1.49		8.2	0.4509

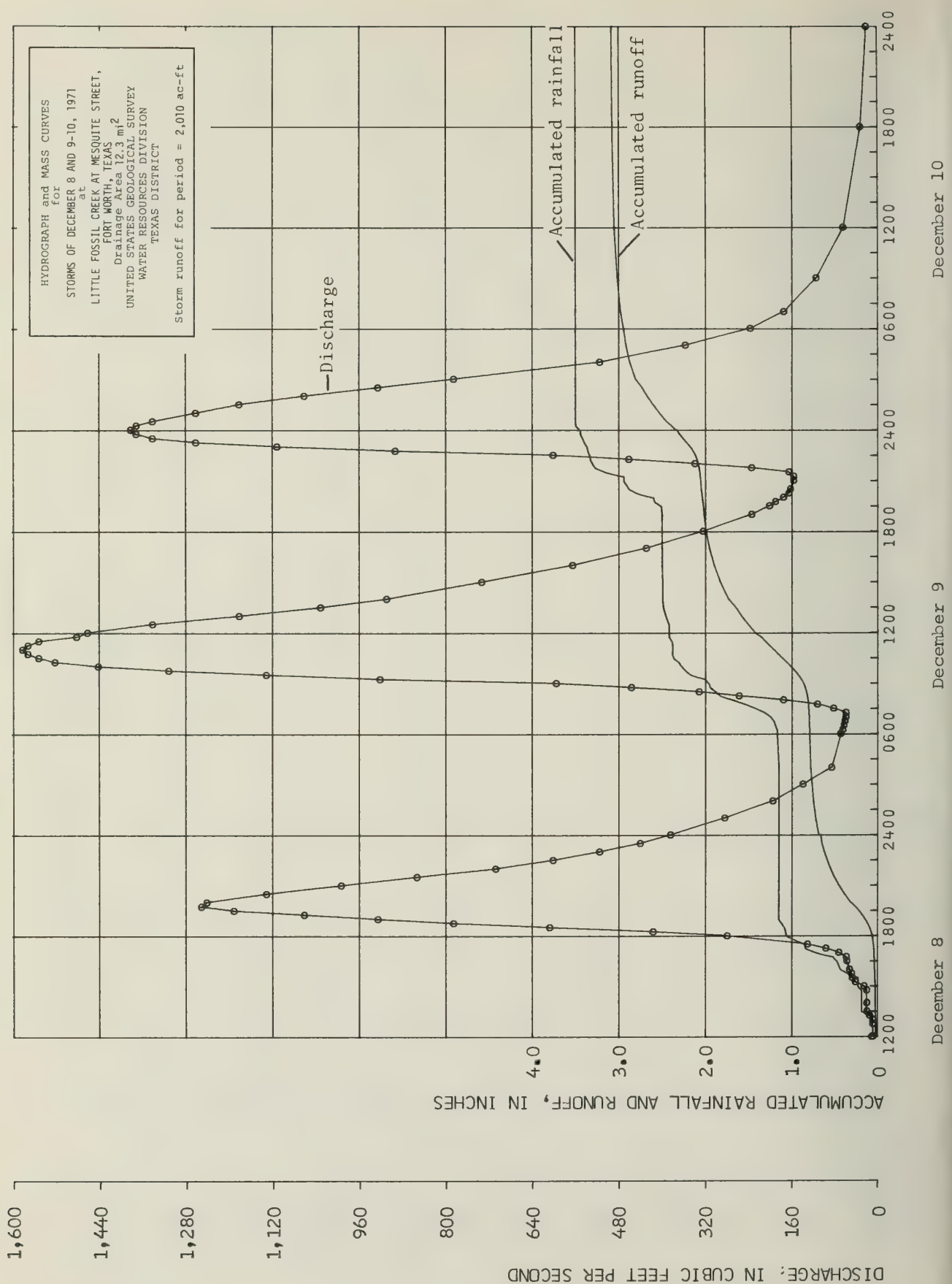
STA. NO. 08048850									
TABLE									
--- STORM RAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF DEC. 8 • 1971									
DATE & TIME	1-1 F			3-1 F			6 A G F		
	N U M B E R			P R E C I P .			I N .		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
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DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		
	PRECIP.			IN.			PRECIP.		
DEC.	1971			1971			1971		

STA. NO. 04042850		TABLE LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF DEC. 9-10, 1971										1972 WATER YEAR	
DATE & TIME		GAGE		STORM OF DEC. 9-10, 1971		PRECIP.		DISCHARGE		ACCUM.		1972 WATER YEAR	
		1-LF	3-LF			IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
DEC. 9													
0300		1.24	1.05				1.14	138.0	0.7530				0.7530
0400		1.24	1.05				1.14	85.0	0.7691				0.7691
0500		1.24	1.04				1.16	68.0	0.7787				0.7787
0615		1.24	1.04				1.16	64.0	0.7808				0.7808
0630		1.27	1.10				1.18	62.0	0.7827				0.7827
0645		1.27	1.13				1.20	60.0	0.7846				0.7846
0700		1.29	1.14				1.23	58.0	0.7864				0.7864
0715		1.41	1.20				1.30	58.0	0.7883				0.7883
0730		1.46	1.35				1.40	81.0	0.7908				0.7908
0745		1.55	1.44				1.52	111.0	0.7943				0.7943
0800		1.76	1.57				1.66	174.0	0.7999				0.7999
0815		1.93	1.70				1.81	256.0	0.8078				0.8078
0830		1.96	1.74				1.87	330.0	0.8182				0.8182
0845		2.00	1.87				1.93	455.0	0.8326				0.8326
0900		2.01	1.90				1.95	594.0	0.8513				0.8513
0915		2.04	1.95				1.99	920.0	0.8803				0.8803
0930		2.27	2.05				2.16	1130.0	0.9158				0.9158
0945		2.31	2.13				2.22	1310.0	0.9571				0.9571
1000		2.36	2.17				2.26	1440.0	1.0025				1.0025
1015		2.40	2.20				2.30	1520.0	1.0503				1.0503
1030		2.49	2.23				2.36	1550.0	1.0991				1.0991
1045		2.50	2.25				2.36	1570.0	1.1486				1.1486
1100		2.50	2.25				2.38	1580.0	1.1984				1.1984
1115		2.50	2.25				2.38	1570.0	1.2478				1.2478
1130		2.51	2.25				2.34	1550.0	1.2966				1.2966
1145		2.57	2.25				2.41	1420.0	1.3432				1.3432
1200		2.58	2.25				2.41	1400.0	1.4122				1.4122
1230		2.58	2.25				2.41	1340.0	1.4966				1.4966
1300		2.61	2.29				2.45	1180.0	1.5709				1.5709
1330		2.63	2.33				2.48	1030.0	1.6358				1.6358
1400		2.63	2.35				2.49	908.0	1.7216				1.7216
1500		2.63	2.35				2.49	732.0	1.8138				1.8138
1600		2.64	2.35				2.49	564.0	1.8849				1.8849
1700		2.64	2.35				2.49	428.0	1.9388				1.9388
1800		2.64	2.35				2.49	323.0	1.9795				1.9795
1900		2.64	2.35				2.49	233.0	2.0015				2.0015
1930		2.66	2.35				2.50	200.0	2.0110				2.0110
1945		2.79	2.37				2.58	149.0	2.0169				2.0169
2000		2.80	2.39				2.59	174.0	2.0224				2.0224

TABLE									
STATION NO. 04048850									
STORM RAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF DEC. 9-10, 1971									
DATE & TIME	1-1 F	3-1 F	G A G F	N U M B E R	WEIGHTED PRECIP. IN.	1972 WATER YEAR			
						DISCHARGE IN	ACCUM. IN	RUNOFF IN	IN.
DEC. 9									
2015	3.06	2.43			2.77	164.0		2.0276	
2030	3.21	2.53			2.87	161.0		2.0352	
2100	3.27	2.60			2.93	155.0		2.0425	
2115	3.27	2.60			2.93	164.0		2.0474	
2130	3.44	2.84			3.14	164.0		2.0525	
2145	3.52	3.00			3.26	233.0		2.0599	
2200	3.55	3.04			3.29	338.0		2.0705	
2215	3.56	3.04			3.32	460.0		2.0850	
2230	3.57	3.09			3.33	600.0		2.1039	
2245	3.58	3.12			3.35	892.0		2.1320	
2300	3.59	3.13			3.36	1110.0		2.1670	
2315	3.62	3.16			3.39	1260.0		2.2066	
2330	3.65	3.17			3.41	1340.0		2.2488	
2345	3.68	3.19			3.43	1370.0		2.2920	
2400	3.69	3.19			3.44	1380.0		2.3137	
DEC. 10									
0000	3.69	3.19			3.44	1380.0		2.3355	
0015	3.74	3.24			3.49	1370.0		2.3786	
0030	3.75	3.24			3.49	1340.0		2.4419	
0100	3.75	3.24			3.49	1260.0		2.5213	
0130	3.75	3.24			3.49	1180.0		2.5956	
0200	3.75	3.24			3.49	1060.0		2.6624	
0230	3.75	3.24			3.49	924.0		2.7206	
0300	3.75	3.24			3.49	784.0		2.7947	
0400	3.75	3.24			3.49	514.0		2.8594	
0500	3.75	3.24			3.49	356.0		2.9043	
0600	3.75	3.24			3.49	236.0		2.9340	
0700	3.75	3.24			3.49	174.0		2.9669	
0800	3.75	3.24			3.49	114.0		3.0026	
1200	3.75	3.24			3.49	64.0		3.0391	
1800	3.75	3.24			3.49	32.0		3.0633	
2400	3.75	3.24			3.49	20.0		3.0708	







STA. NO. 08048550		TABLE STORM RAINFALL AND RUNOFF RECORD										1972 WATER YEAR	
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.		STORM OF OCT. 19, 1971										DISCHARGE ACCUM.	
DATE & TIME		G A G E N U M B E R										IN RUNOFF	
		I-D-R										FT3/S IN.	
OCT. 19													
2105	2.98											2.98	309.0
2110	2.98											2.98	335.0
2115	3.00											3.00	348.0
2120	3.01											3.01	357.0
2125	3.03											3.03	382.0
2130	3.04											3.04	406.0
2135	3.06											3.06	420.0
2140	3.08											3.08	422.0
2145	3.09											3.09	418.0
2150	3.09											3.09	406.0
2055	3.10											3.10	391.0
2200	3.11											3.11	372.0
2215	3.14											3.14	304.0
2230	3.18											3.18	245.0
2245	3.20											3.20	195.0
2300	3.21											3.21	148.0
2315	3.21											3.21	115.0
2330	3.22											3.22	95.0
2345	3.22											3.22	79.0
2400	3.22											3.22	65.0

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

TABLE 08048550									
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048550									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
1972 WATER YEAR									
DATE & TIME									
1-DR									
G A G F N U M B E R									
STORM OF DEC. 2, 1971									
PRECIP. FT3/S									
IN.									
ACCUM. DISCHARGE									
WEIGHTED IN RUNOFF									
IN.									
DEC. 2									
0000	0.0							0.0	*****
0200	0.0							0.0	*****
0300	0.03							0.03	*****
0400	0.06							0.06	*****
0500	0.04							0.04	*****
0600	0.16							0.16	*****
0700	0.16							0.16	*****
0800	0.14							0.14	*****
0900	0.24							0.24	*****
1000	0.37							0.37	*****
1015	0.38							0.38	*****
1030	0.39							0.39	*****
1045	0.56							0.56	*****
1100	0.67							0.67	*****
1115	0.74							0.74	*****
1130	0.80							0.80	*****
1145	0.85							0.85	*****
1200	0.93							0.93	*****
1215	0.98							0.98	*****
1230	1.06							1.06	*****
1245	1.13							1.13	*****
1300	1.20							1.20	*****
1315	1.32							1.32	*****
1330	1.42							1.42	*****
1345	1.46							1.46	*****
1350	1.47							1.47	*****
1355	1.48							1.48	*****
1400	1.49							1.49	*****
1415	1.54							1.54	*****
1430	1.58							1.58	*****
1445	1.59							1.59	*****
1500	1.60							1.60	*****
1515	1.60							1.60	*****
1530	1.60							1.60	*****
1545	1.60							1.60	*****
1600	1.60							1.60	*****
2400	1.60							1.60	*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

STATION NO. 08048550									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF DEC. 9-10, 1971									
DATE & TIME	G A G F				PRECIP. IN.	FT ³ /S	DISCHARGE		
	1-DR						IN	ACCUM.	ACCUM. RUNOFF
DEC. 9									
0000	0.0				0.0	*****	*****	*****	*****
0500	0.0				0.0	*****	*****	*****	*****
0600	0.02				0.02	*****	*****	*****	*****
0615	0.02				0.02	*****	*****	*****	*****
0630	0.02				0.02	*****	*****	*****	*****
0645	0.09				0.09	*****	*****	*****	*****
0700	0.14				0.14	*****	*****	*****	*****
0715	0.17				0.17	*****	*****	*****	*****
0730	0.42				0.42	32.0	*****	*****	*****
0735	0.45				0.45	46.0	*****	*****	*****
0740	0.50				0.50	59.0	*****	*****	*****
0745	0.57				0.57	71.0	*****	*****	*****
0800	0.68				0.68	84.0	*****	*****	*****
0815	0.78				0.78	132.0	*****	*****	*****
0830	0.92				0.92	166.0	*****	*****	*****
0845	0.98				0.98	190.0	*****	*****	*****
0900	1.02				1.02	194.0	*****	*****	*****
0915	1.07				1.07	194.0	*****	*****	*****
0930	1.17				1.17	177.0	*****	*****	*****
0945	1.23				1.23	167.0	*****	*****	*****
1000	1.24				1.24	155.0	*****	*****	*****
1030	1.30				1.30	125.0	*****	*****	*****
1100	1.32				1.32	96.0	*****	*****	*****
1130	1.32				1.32	73.0	*****	*****	*****
1200	1.32				1.32	55.0	*****	*****	*****
1300	1.36				1.36	30.0	*****	*****	*****
1400	1.43				1.43	*****	*****	*****	*****
1800	1.45				1.45	*****	*****	*****	*****
1930	1.45				1.45	*****	*****	*****	*****
1945	1.46				1.46	*****	*****	*****	*****
2000	1.49				1.49	*****	*****	*****	*****
2015	1.57				1.57	*****	*****	*****	*****
2030	1.64				1.64	*****	*****	*****	*****
2045	1.65				1.65	*****	*****	*****	*****
2100	1.65				1.65	*****	*****	*****	*****
2115	1.68				1.68	39.0	*****	*****	*****
2130	1.95				1.95	46.0	*****	*****	*****
2145	2.14				2.14	96.0	*****	*****	*****
2150	2.15				2.15	113.0	*****	*****	*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

STATION NO. 08048550									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF DEC. 9-10, 1971									
PRECIP. IN. DISCHARGE IN. ACCUM. W/UGHTEN IN. RUNOFF									
DATE & TIME									
1-02									
G A G F N U M B E R									
FT ³ /S IN. IN. IN.									
DEC. 9									
2155	2.16						2.16	126.0	*****
2200	2.16						2.16	134.0	*****
2215	2.19						2.19	138.0	*****
2230	2.20						2.20	140.0	*****
2245	2.22						2.22	113.0	*****
2300	2.25						2.25	94.0	*****
2315	2.26						2.26	45.0	*****
2330	2.28						2.28	75.0	*****
2345	2.32						2.32	67.0	*****
2400	2.38						2.38	64.0	*****
DEC. 10									
0000	2.38						2.38	64.0	*****
0100	2.39						2.39	47.0	*****
0200	2.41						2.41	40.0	*****
2400	2.41						2.41	*****	*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

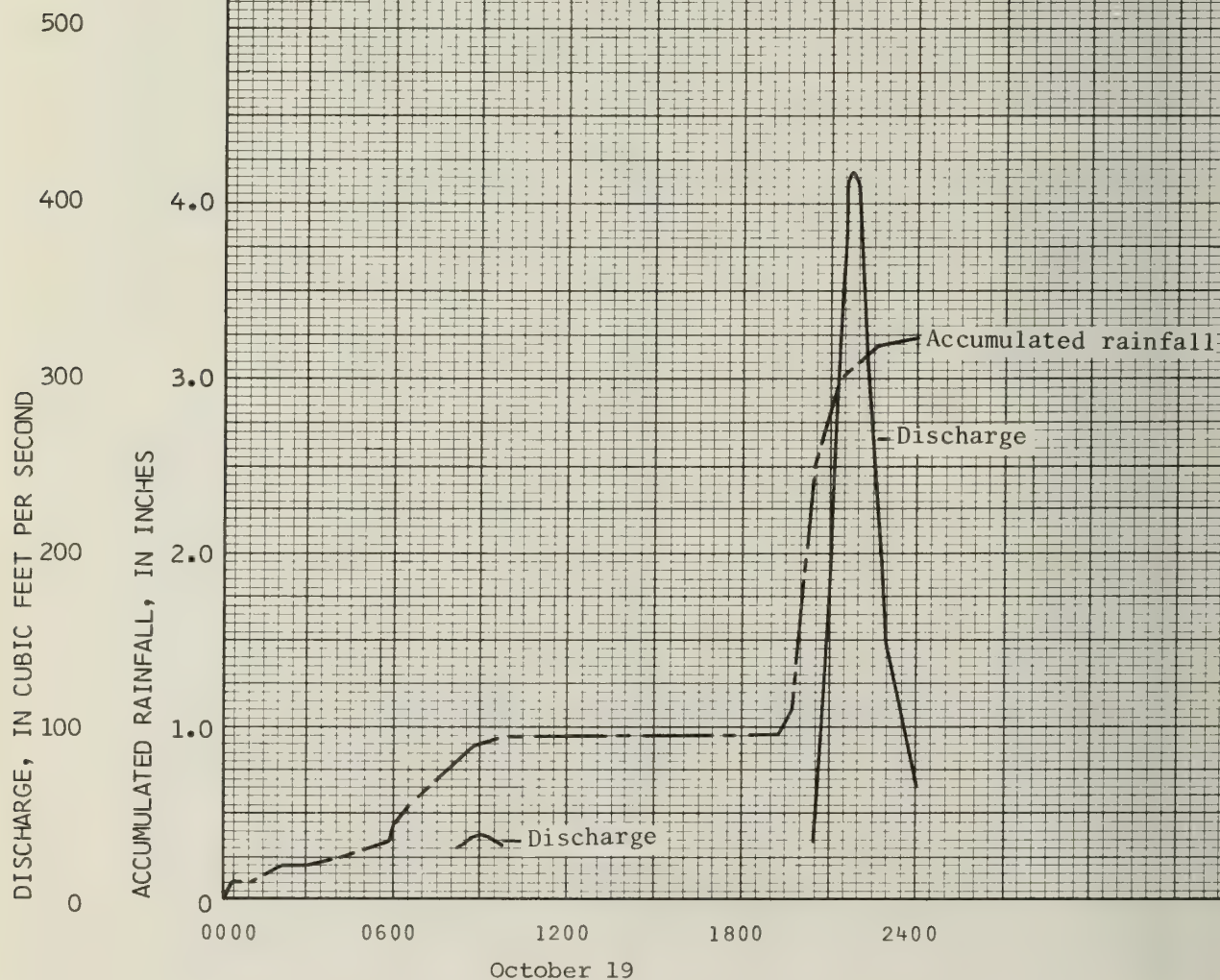
HYDROGRAPH and MASS CURVES

for
STORM OF OCTOBER 19, 1971

at
DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS

Drainage Area 1.08 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = ac-ft.



HYDROGRAPH and MASS CURVES

for

STORM OF DECEMBER 2, 1971

at

DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS

Drainage Area 1.08 mi²

UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = ac-ft.

DISCHARGE, IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

0 20 40 60 80 100 0.00 0.30 0.60 0.90 1.20 1.50 1.80 2.10 2.40

December 2

Accumulated rainfall
Discharge

HYDROGRAPH and MASS CURVES for

STORM OF DECEMBER 9-10, 1971

at

DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS

Drainage Area 1.08 mi²

UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = ac-ft.

DISCHARGE, IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

0000

0600

1200

1800

2400

0600

1200

1800

2400

December 9

December 10

Accumulated rainfall

Discharge

Discharge

STA. NO. 08048426									
TABLE									
STORM FAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX STORM OF OCT. 19-20, 1971									
DATE & TIME	G A G E				WEIGHTED PRECIP. IN.	DISCHARGE			
	1-LF	2-LF				FT ³ /S			IN.
OCT. 19									
0000	0.0	0.0			0.0	*****			*****
0015	0.0	0.0			0.0	*****			*****
0030	0.29	0.02			0.23	*****			*****
0045	0.40	0.11			0.33	*****			*****
0100	0.40	0.11			0.33	*****			*****
0130	0.40	0.13			0.34	*****			*****
0200	0.40	0.14			0.34	*****			*****
0300	0.41	0.15			0.35	*****			*****
0330	0.48	0.20			0.41	*****			*****
0400	0.49	0.22			0.43	*****			*****
0430	0.50	0.23			0.44	*****			*****
0500	0.55	0.25			0.48	*****			*****
0600	0.62	0.30			0.54	*****			*****
0630	0.69	0.36			0.61	*****			*****
0700	0.70	0.41			0.71	*****			*****
0715	0.85	0.50			0.77	*****			*****
0730	0.71	0.52			19.0	*****			*****
0745	0.99	0.59			0.82	*****			*****
0800	1.00	0.63			21.0	*****			*****
0815	1.03	0.71			25.0	*****			*****
0830	1.06	0.72			33.0	*****			*****
0845	1.09	0.78			40.0	*****			*****
0900	1.09	0.79			49.0	*****			*****
0930	1.09	0.80			52.0	*****			*****
1000	1.13	0.81			1.02	*****			*****
1100	1.13	0.81			1.02	*****			*****
1200	1.13	0.81			1.02	*****			*****
1215	1.13	0.81			1.05	*****			*****
1230	1.13	0.81			1.05	*****			*****
1245	1.13	0.81			1.05	*****			*****
1300	1.13	0.81			1.05	*****			*****
1315	1.13	0.81			1.05	*****			*****
1330	1.13	0.81			1.05	*****			*****
1345	1.13	0.81			1.05	*****			*****
1400	1.13	0.81			1.05	*****			*****
1415	1.13	0.81			1.05	*****			*****
1430	1.13	0.81			1.05	*****			*****
1500	1.13	0.81			1.05	*****			*****
1530	1.16	0.83			43.0	*****			*****
					34.0	*****			*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

TABLE 1 STATION NO. 03048820 LITTLE FOSSIL CREEK AT INTERSTATE HWY 20, FT WORTH, TEX STORM OF OCT. 19-20, 1971									
STORM RAINFALL AND RUNOFF RECORD									
1972 WATER YEAR									
DATE & TIME	1-IF	2-IF	G A G E		N U M B E R		ACCUM. WEIGHED PRECIP. IN.	DISCHARGE IN	ACCUM. RUNOFF IN.
OCT. 19									
1500	1.20	0.83					1.11	29.0	*****
1700	1.20	0.83					1.11	21.0	*****
1900	1.20	0.83					1.11	19.0	*****
1900	1.20	0.83					1.11	*****	*****
1930	1.21	0.85					1.12	*****	*****
1945	1.27	0.89					1.13	*****	*****
2000	1.38	1.04					1.30	*****	*****
2015	1.47	1.15					1.39	*****	*****
2030	1.59	1.37					1.54	19.0	*****
2045	1.69	1.52					1.65	40.0	*****
2100	1.98	1.81					1.94	71.0	*****
2115	2.01	1.83					1.97	127.0	*****
2130	2.07	1.88					2.02	127.0	*****
2145	2.11	1.94					2.06	153.0	*****
2200	2.12	1.94					2.04	113.0	*****
2215	2.13	1.96					2.09	95.0	*****
2230	2.17	1.98					2.12	121.0	*****
2245	2.20	2.00					2.15	144.0	*****
2300	2.21	2.02					2.16	146.0	*****
2315	2.21	2.03					2.17	151.0	*****
2330	2.22	2.04					2.18	151.0	*****
2345	2.22	2.04					2.18	151.0	*****
2400	2.22	2.04					2.18	146.0	*****
OCT. 20									
0000	2.22	2.04					2.18	146.0	*****
0100	2.22	2.04					2.18	137.0	*****
0200	2.22	2.04					2.18	137.0	*****
0300	2.22	2.04					2.18	109.0	*****
0400	2.22	2.04					2.18	100.0	*****
0500	2.22	2.04					2.18	97.0	*****
0600	2.22	2.04					2.18	71.0	*****
0700	2.22	2.04					2.18	55.0	*****
1000	2.22	2.04					2.19	33.0	*****
1200	2.22	2.04					2.18	21.0	*****
1300	2.22	2.04					2.18	20.0	*****
1400	2.22	2.05					2.18	*****	*****
2400	2.22	2.05					2.18	*****	*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

TABLE STATION NO. 08048820									
STORM RAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TX									
DEC. 2, 1971									
DATE & TIME	1-LF	2-LF	GAGE NUMBER		WEIGHTED PRECIP. IN.	DISCHARGE IN	FT ³ /S	ACCUM. IN.	1972 WATER YEAR RUNOFF IN.
DEC. 2									
0000	0.0	0.0			0.0	*****	*****	*****	*****
0200	0.0	0.0			0.0	*****	*****	*****	*****
0300	0.05	0.04			0.05	*****	*****	*****	*****
0400	0.03	0.06			0.04	*****	*****	*****	*****
0500	0.09	0.08			0.09	*****	*****	*****	*****
0600	0.12	0.15			0.13	*****	*****	*****	*****
0700	0.13	0.15			0.13	*****	*****	*****	*****
0800	0.15	0.16			0.15	*****	*****	*****	*****
0830	0.17	0.19			0.17	*****	*****	*****	*****
0900	0.21	0.25			0.22	*****	*****	*****	*****
0930	0.23	0.26			0.24	*****	*****	*****	*****
1000	0.26	0.31			0.27	*****	*****	*****	*****
1030	0.27	0.31			0.28	*****	*****	*****	*****
1045	0.45	0.31			0.42	*****	*****	*****	*****
1100	0.55	0.52			0.54	*****	*****	*****	*****
1115	0.61	0.58			0.60	*****	*****	*****	*****
1130	0.66	0.63			0.65	*****	*****	*****	*****
1145	0.71	0.67			0.70	*****	*****	*****	*****
1200	0.74	0.71			0.75	*****	*****	*****	*****
1215	0.82	0.77			0.81	*****	*****	*****	*****
1230	0.89	0.84			0.88	*****	*****	*****	*****
1245	0.97	0.94			0.96	*****	*****	*****	*****
1300	1.05	1.00			1.04	*****	*****	*****	*****
1315	1.15	1.10			1.14	*****	*****	*****	*****
1330	1.22	1.20			1.22	*****	*****	*****	*****
1345	1.27	1.23			1.26	*****	*****	*****	*****
1400	1.31	1.27			1.30	*****	*****	*****	*****
1415	1.33	1.30			1.32	*****	*****	*****	*****
1430	1.37	1.35			1.37	*****	*****	*****	*****
1445	1.38	1.37			1.38	*****	*****	*****	*****
1500	1.39	1.36			1.39	*****	*****	*****	*****
1515	1.40	1.39			1.40	*****	*****	*****	*****
1530	1.40	1.39			1.40	*****	*****	*****	*****
1545	1.40	1.39			1.40	*****	*****	*****	*****
1600	1.40	1.39			1.40	*****	*****	*****	*****
1615	1.40	1.39			1.40	*****	*****	*****	*****
1630	1.40	1.39			1.40	*****	*****	*****	*****
1645	1.40	1.39			1.40	*****	*****	*****	*****
1700	1.40	1.39			1.40	*****	*****	*****	*****

AN ASTERISK INDICATES COMPLETE DISCHARGE RECORDS ARE NOT COLLECTED FOR THIS BASIN

STA. NO. 0R04RR20									
TABLE									
STORM RAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 20, FT WORTH, TX									
DEC. 2, 1971									
DATE & TIME									
1-LF 2-LF									
G A G E									
N U M B E R									
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===== 1972 WATER YEAR =====									
----- STORM RAINFALL AND RUNOFF RECORD -----									
=====									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 20, FT 40TH, TX STORM OF DEC. 8, 1971									
=====									
DATE & TIME	1-LF	2-LF	5 A G E	N U M B E R	STORM OF	DEC. 8	1971	DISCHARGE	ACCUM.
=====									
								IN	PRECIP.
=====									
DEC. 8								FT ³ /S	IN.
0000	0.0	0.0						2.0	0.0032
1130	0.0	0.0						2.0	0.0067
1245	0.0	0.02						2.0	0.0071
1300	0.04	0.05						2.0	0.0072
1315	0.04	0.22						2.0	0.0073
1330	0.14	0.24						2.0	0.0076
1400	0.14	0.24						2.0	0.0079
1445	0.14	0.24						2.0	0.0082
1500	0.20	0.24						2.0	0.0083
1515	0.20	0.24						2.0	0.0085
1530	0.20	0.24						3.0	0.0085
1545	0.40	0.53						7.0	0.0090
1600	0.53	0.54						11.0	0.0098
1615	0.54	0.60						20.0	0.0111
1630	0.56	0.63						40.0	0.0139
1645	0.60	0.70						42.0	0.0168
1700	0.90	0.90						37.0	0.0193
1715	0.97	0.94						43.0	0.0223
1730	0.94	0.96						113.0	0.0300
1745	1.18	1.20						137.0	0.0394
1800	1.18	1.20						140.0	0.0440
1815	1.18	1.20						175.0	0.0611
1830	1.19	1.20						265.0	0.0793
1845	1.22	1.23						272.0	0.0979
1900	1.24	1.23						289.0	0.1178
1915	1.24	1.23						325.0	0.1401
1930	1.24	1.23						345.0	0.1645
1945	1.24	1.23						388.0	0.1912
2000	1.24	1.23						409.0	0.2192
2015	1.24	1.23						430.0	0.2488
2030	1.24	1.23						430.0	0.2743
2045	1.24	1.23						421.0	0.3072
2100	1.24	1.23						415.0	0.3357
2115	1.24	1.23						400.0	0.3632
2130	1.24	1.23						342.0	0.3895
2145	1.24	1.23						367.0	0.4147
2200	1.24	1.23						349.0	0.4346
2215	1.24	1.23						334.0	0.4616
2230	1.24	1.23						313.0	0.4831
	1.24	1.23						294.0	0.5035
=====									

STA. NO.	DATE & TIME	TABLE										1972 WATER YEAR		
		LITTLE FOSSIL CREEK AT INTERSTATE HWY 420, FT WORTH, TX										STORM RAINFALL AND RUNOFF RECORD		
		STORM OF DEC. 9-10, 1971												
		G A G E N U M B E R												
		1-LF	2-LF								ACCUM. UNWEIGHTED PRECIP. IN.	DISCHARGE IN	ACCUM. RUNOFF IN.	
DEC. 9														
1500		2.63	2.62								2.63	394.0	1.7081	
1600		2.64	2.63								2.64	301.0	1.7908	
1700		2.64	2.63								2.64	225.0	1.8526	
1800		2.64	2.63								2.64	164.0	1.8988	
1900		2.64	2.63								2.64	123.0	1.9199	
1915		2.65	2.64								2.65	115.0	1.9278	
1930		2.66	2.65								2.66	109.0	1.9353	
1945		2.79	2.74								2.79	102.0	1.9423	
2000		2.80	2.74								2.80	99.0	1.9491	
2015		3.06	3.05								3.06	97.0	1.9557	
2030		3.21	3.20								3.21	104.0	1.9631	
2045		3.27	3.26								3.27	131.0	1.9721	
2100		3.27	3.26								3.27	154.0	1.9830	
2115		3.27	3.26								3.27	180.0	1.9954	
2130		3.44	3.43								3.44	220.0	2.0105	
2145		3.52	3.51								3.52	301.0	2.0311	
2200		3.55	3.54								3.55	373.0	2.0568	
2215		3.56	3.55								3.56	436.0	2.0867	
2230		3.57	3.56								3.57	512.0	2.1219	
2245		3.58	3.57								3.58	562.0	2.1605	
2300		3.59	3.58								3.59	582.0	2.2005	
2315		3.62	3.61								3.62	600.0	2.2417	
2330		3.65	3.64								3.65	619.0	2.2841	
2345		3.68	3.67								3.68	624.0	2.3270	
2400		3.69	3.68								3.69	624.0	2.3444	
DEC. 10														
0000		3.69	3.68								3.69	624.0	2.3698	
0015		3.74	3.73								3.74	614.0	2.4123	
0030		3.75	3.74								3.75	614.0	2.4547	
0045		3.75	3.74								3.75	614.0	2.4969	
0100		3.75	3.74								3.75	596.0	2.5378	
0115		3.75	3.74								3.75	565.0	2.5766	
0130		3.75	3.74								3.75	554.0	2.6147	
0145		3.75	3.74								3.75	523.0	2.6506	
0200		3.75	3.74								3.75	494.0	2.6848	
0215		3.75	3.74								3.75	474.0	2.7174	
0230		3.75	3.74								3.75	444.0	2.7482	
0245		3.75	3.74								3.75	421.0	2.7771	
0300		3.75	3.74								3.75	391.0	2.8174	
0330		3.75	3.74								3.75	344.0	2.8644	

STA. NO.	08048820	TABLE ----- STORM RAINFALL AND RUNOFF RECORD -----										1972 WATER YEAR	
LITTLE FOSSIL CREEK AT INTERSTATE 44Y 820, FT WORTH, TX												DISCHARGE	
STORM OF DEC. 9-10, 1971												IN	
G A F N U M B E R												ACCUM.	
1-LF 2-LF												WEIGHTED	
DATE & TIME												PRECIP.	
DEC. 10												IN.	
0400	3.75	3.74										238.0	2.9058
0430	3.75	3.74										252.0	2.9404
0500	3.75	3.74										222.0	2.9709
0530	3.75	3.74										190.0	2.9970
0600	3.75	3.74										160.0	3.0190
0630	3.75	3.74										137.0	3.0378
0700	3.75	3.74										121.0	3.0628
0800	3.75	3.74										97.0	3.1028
1000	3.75	3.74										64.0	3.1379
1200	3.75	3.74										42.0	3.1841
1800	3.75	3.74										21.0	3.2187
2400	3.75	3.74										20.0	3.2352

HYDROGRAPH and MASS CURVES

for
STORM OF OCTOBER 19-20, 1971
at

LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 mi²

UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

160

140

120

100

80

60

40

20

0

DISCHARGE, IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL, IN INCHES

Storm runoff for period = ac-ft.

3.0

2.0

1.0

0

Accumulated rainfall

Discharge

Discharge

0000

0600

1200

1800

2400

0600

1200

1800

2400

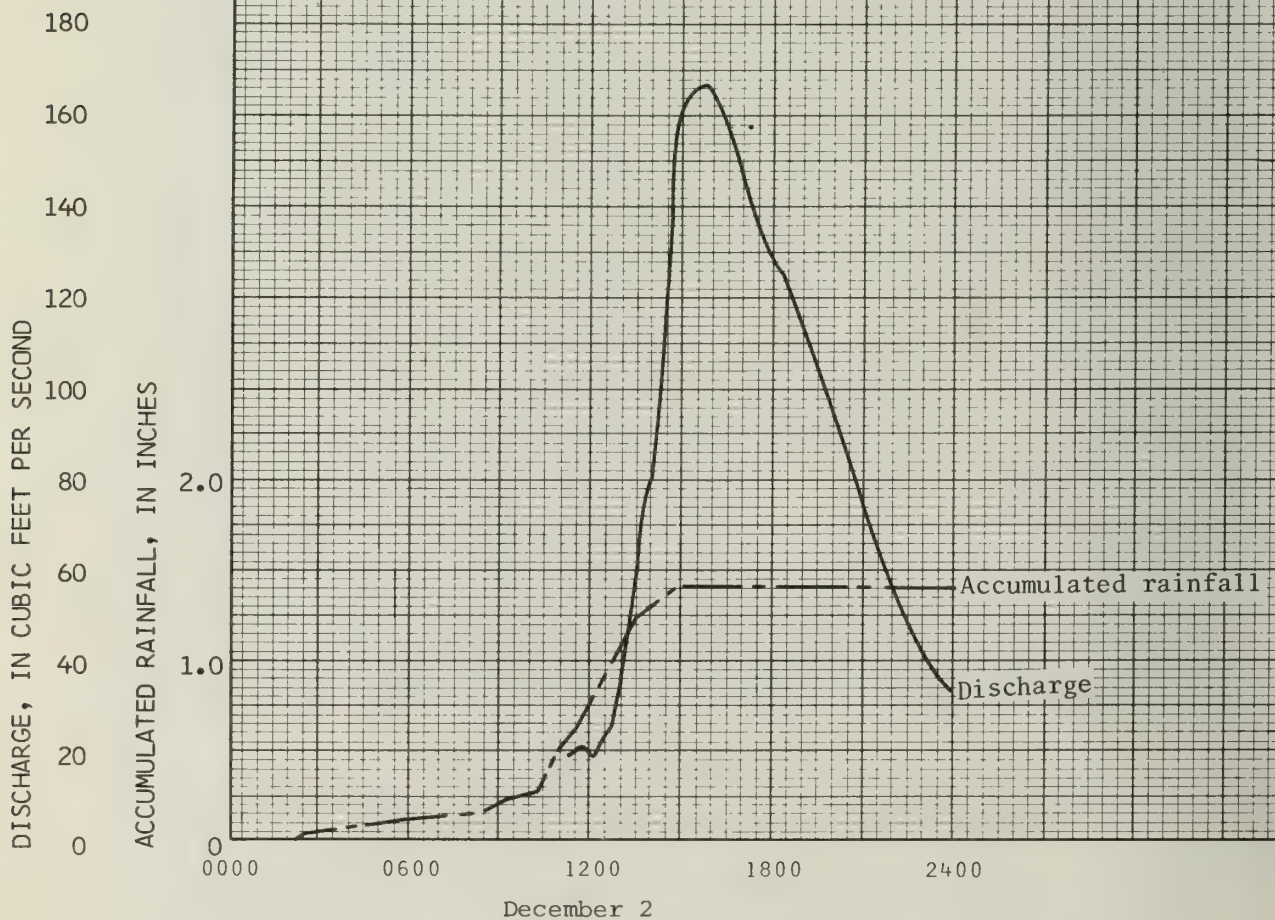
October 19

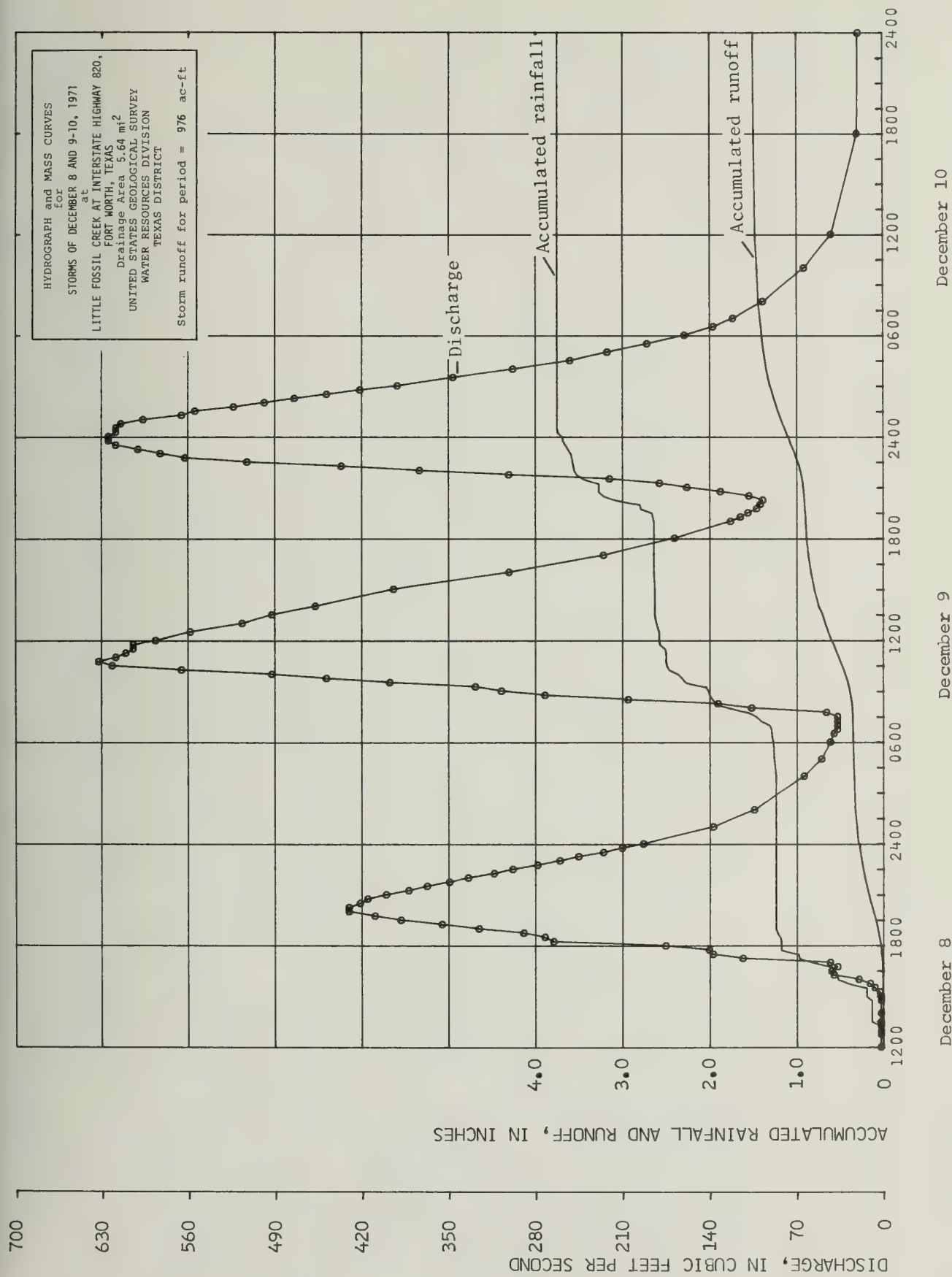
October 20

HYDROGRAPH and MASS CURVES
for
STORM OF DECEMBER 2, 1971
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS

Drainage Area 5.64 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = ac-ft.

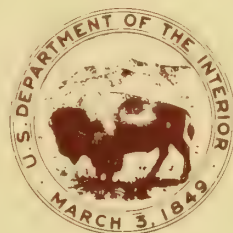




Hydrologic Data for Urban Studies in the Fort Worth, Texas Metropolitan Area, 1973

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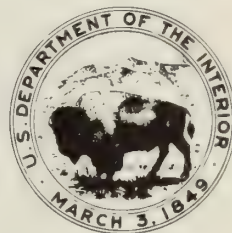
Prepared in cooperation with the City of Fort Worth

Hydrologic Data for Urban Studies in the Fort Worth, Texas Metropolitan Area, 1973

By B. B. Hampton

U.S. GEOLOGICAL SURVEY

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Prepared in cooperation with the City of Fort Worth

May 1975

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Austin, TX 78701

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HYDROLOGIC DATA FOR URBAN STUDIES IN THE

FORT WORTH, TEXAS METROPOLITAN AREA,

1973

By

B. B. Hampton
U.S. Geological Survey

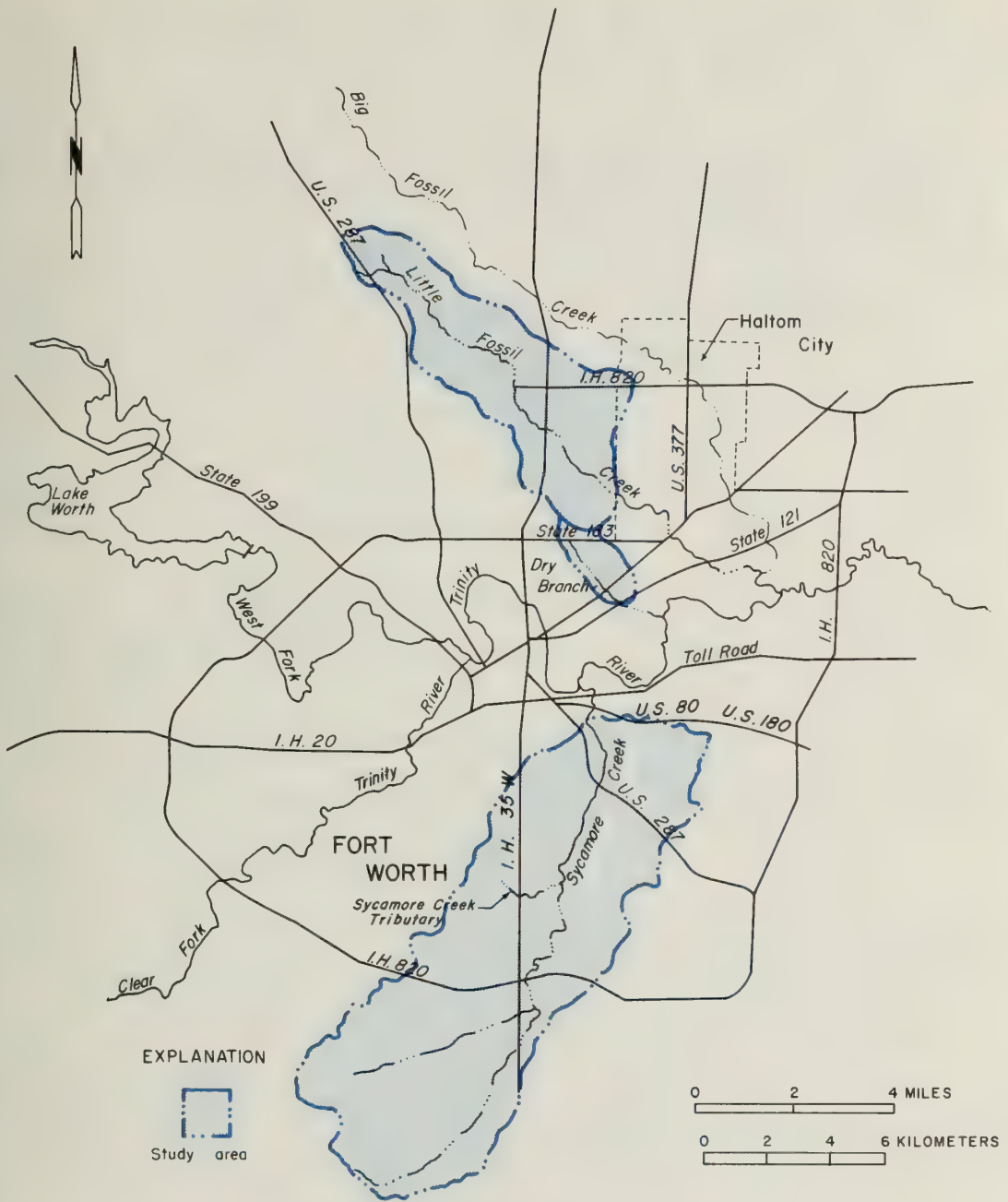
INTRODUCTION

Hydrologic investigations of urban areas in Texas were begun by the U.S. Geological Survey in 1954. These investigations are now in progress in several major metropolitan areas including Austin, Dallas, Dallas County, Houston, and San Antonio.

In October 1968, the Geological Survey in cooperation with the city of Fort Worth Department of Public Works began a program of hydrologic investigations on several small streams in Fort Worth. The investigations are designed to evaluate factors affecting floods on small streams in the metropolitan area. Studies of additional streams, one of which drains beneath the impervious area of a shopping center, were added to the program in October 1969. The objectives of the program are:

1. To determine, on the basis of historical data and hydrologic analyses, the magnitude and frequency of floods.
2. To document and define the areal extent of floods of greater than ordinary magnitude.
3. To determine the effect of urban development on flood peaks and volume.

This report is the fifth in a series of reports to be published annually for the Fort Worth area as part of a continuing program. The report presents the basic hydrologic data collected in four study areas during the 1973 water year (October 1, 1972-September 30, 1973). The four study areas within the metropolitan area are Sycamore Creek, Sycamore Creek tributary, Dry Branch, and Little Fossil Creek (fig. 1). The Sycamore Creek tributary study area includes the highly impervious area of the Seminary South Shopping Center (fig. 1) as a subarea.



Base from General Highway
map of Texas

FIGURE 1.— Locations of Sycamore Creek, Sycamore Creek tributary, Dry Branch, and Little Fossil Creek study areas

To facilitate the publication and distribution of this report at the earliest feasible time, certain material contained herein does not conform to the formal publication standards of the U.S. Geological Survey.

For those readers interested in using the metric system, metric equivalents of English units of measurements are given in parentheses. The English units used in this report may be converted to metric units by using the following conversion factors:

From		Multiply by	To obtain	
Unit	Abbrevi- ation		Unit	Abbrevi- ation
inches	--	25.4	millimetres	mm
feet	--	.3048	metres	m
miles	--	1.609	kilometres	km
square miles	mi ²	2.590	square kilometres	km ²
cubic feet per second	ft ³ /s	.02832	cubic metres per second	m ³ /s
feet per mile	ft/mi	.189	metres per kilometre	m/km
acre-feet	acre-ft	1233	cubic metres	m ³
		.001233	cubic hectometres	hm ³

WATERSHED FEATURES

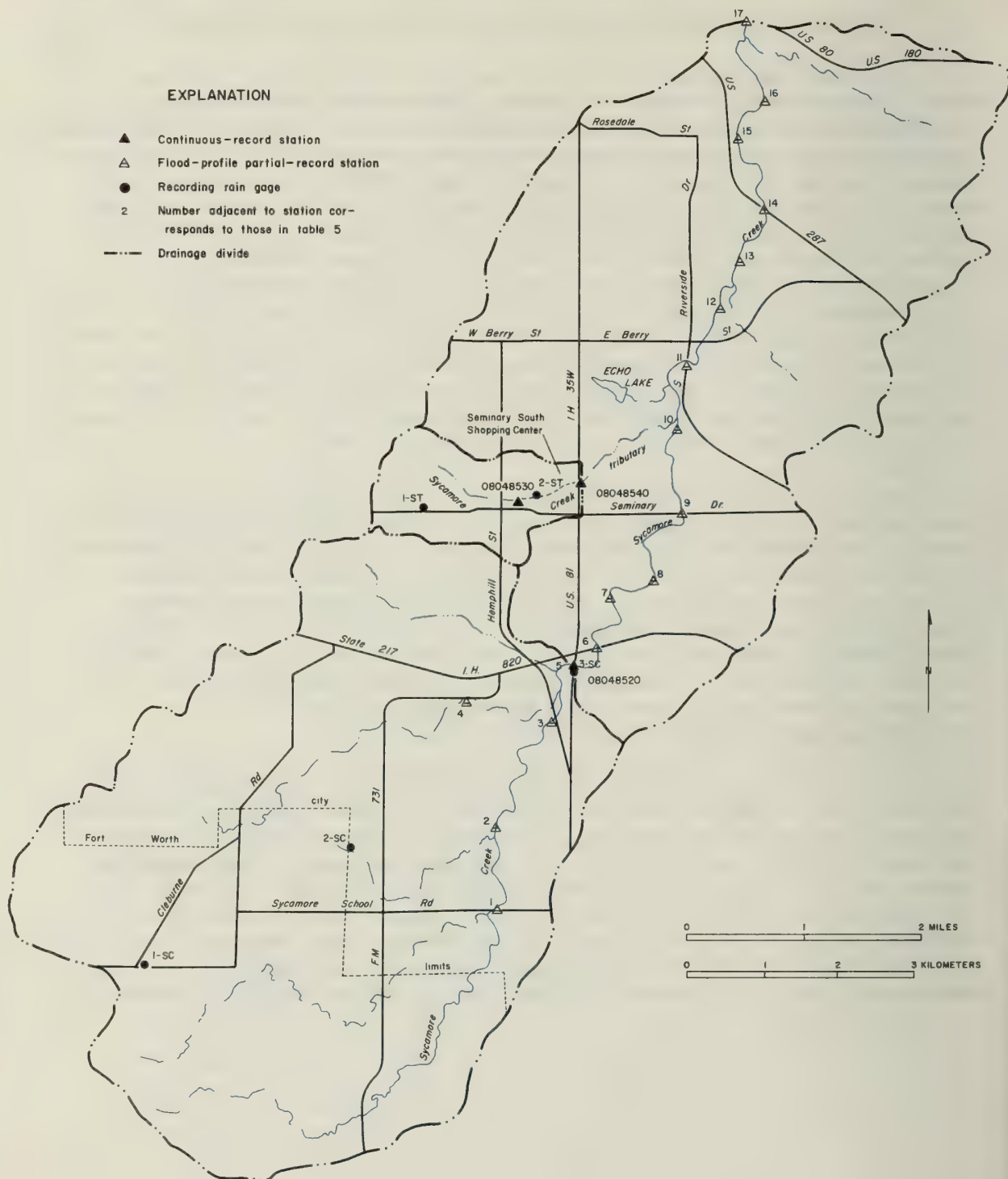
Sycamore Creek and Sycamore Creek Tributary Study Areas

Sycamore Creek (fig. 2) is located south and east of downtown Fort Worth in south-central Tarrant County. The headwaters originate in a rural area in the southwest section of Fort Worth. Parts of this rural area are being urbanized. The stream flows northeastwardly in an open channel and passes beneath Interstate Highway 35-W to southeast Fort Worth. The stream continues its northeasterly course through residential and light industrial sections of the near-east side of Fort Worth and on into the West Fork Trinity River. The creek decreases in altitude from approximately 840 feet (256 m) above mean sea level at the headwaters to 630 feet (192 m) at Interstate Highway 35-W, a distance of 8.2 miles (13.2 km). The creek decreases in altitude from 630 feet (192 m) at Interstate Highway 35-W to 496 feet (151 m) at U.S. Highway 80 and 180 (0.9 mile or 1.5 km upstream from West Fork Trinity River), a distance of 7.8 miles (12.6 km). The altitude at the mouth of Sycamore Creek is about 489 feet (149 m) above mean sea level.

Sycamore Creek tributary (fig. 2) is within the Sycamore Creek drainage basin. The tributary is in the south-central section of Fort Worth. The headwaters originate approximately 1.3 miles (2.1 km) west of Seminary South Shopping Center (fig. 2). A storm-water drainage system collects runoff from a residential-park area through street-gutter inlets upstream from Hemphill Street (fig. 2). The tributary flows easterly through a system of open channel and pipe-arch and box culverts. Storm water from the shopping center, two peripheral residential-commercial areas, and Interstate Highway 35-W flows into the underground drainage system.

Sycamore Creek tributary decreases in altitude from approximately 760 feet (232 m) above mean sea level at the headwaters to approximately 649 feet (198 m) at the west edge of Seminary South Shopping Center, a distance of 1.3 miles (2.1 km). At the western edge of the shopping center and at the entrance of the underground pipe-arch culvert, the altitude changes abruptly from 649 to 643 feet (198 to 196 m) in a distance of about 25 feet (8 m). The tributary then decreases in altitude from 643 feet (196 m) at the entrance to 618.7 feet (188.6 m) at the downstream side of Interstate Highway 35-W, a distance of approximately 0.7 mile (1.1 km).

- ▲ Continuous-record station
- △ Flood-profile partial-record station
- Recording rain gage
- 2 Number adjacent to station corresponds to those in table 5
- Drainage divide



Base from U S Geological Survey
topographic quadrangles

FIGURE 2.—Locations of hydrologic-instrument installations in the Sycamore Creek and Sycamore Creek tributary study areas

The Seminary South Shopping Center contains many retail business establishments, large parking areas, and one high-rise building. The flat roofs of many buildings are topped with aggregate, and considerable storage of water can occur on the rooftops. The drainage system in the center is composed of gutter inlets connected to many subsurface concrete lateral pipes; each pipe feeds a main. The mains drain into a central concrete-arch culvert beneath the center. Runoff (estimated) from the shopping center is the differences of routed runoff between the gaging stations above (No. 08048530) and below (No. 08048540) the shopping center. Monthly rainfall and runoff data of the impervious area of the shopping center are presented in table 1.

Dry Branch and Little Fossil Creek Study Areas

Dry Branch (fig. 3) is located in the northeast part of Fort Worth in Tarrant County. The headwaters originate 1.3 miles (2.1 km) northwest of the Fort Worth Refinery. The stream upstream from the refinery flows southeasterly in an open channel and through a culvert beneath the refinery. Downstream from the refinery the stream flows southeastwardly through a residential section for about 3.0 miles (4.8 km) to the West Fork Trinity River. The stream decreases in altitude from approximately 635 feet (194 m) above mean sea level at the headwaters above the Fort Worth Refinery to 538.5 feet (164.1 m) at Fain Street, a distance of 3.6 miles (5.8 km).

Little Fossil Creek (fig. 3) is located north of downtown Fort Worth in north-central Tarrant County. The headwaters originate in a rural area northwest of Saginaw, and the stream flows in an open channel southeasterly past Saginaw, through the Greater Southwest Corporation Industrial Park, and into the northeastern part of Fort Worth. The stream continues its southeasterly course from Fort Worth through Haltom City to Big Fossil Creek, and on into the West Fork Trinity River (fig. 1). The creek decreases in altitude from approximately 810 feet (247 m) above mean sea level at the headwaters north of Saginaw to 550 feet (168 m) at Mesquite Street in northeast Fort Worth, a distance of 9.3 miles (15.0 km).

HYDROLOGIC INSTRUMENTS

Instruments to collect rainfall, runoff, and flood-profile data in the Sycamore Creek study area consist of 3 recording rain gages, 1 continuous-record stream-gaging station, and 16 flood-profile partial-record gages.

Table 1.--Summary of monthly rainfall-runoff relationship for the
1973 water year for the Seminary South Shopping Center

Month	(2-ST) Rainfall (inches)	Runoff (inches) <u>1/</u>	Ratio of runoff to rainfall <u>1/</u>
<u>1972</u>			
October	5.47	2.19	0.40
November	2.55	.79	.31
December	.58	.19	.33
<u>1973</u>			
January	2.76	.57	.21
February	1.79	.58	.32
March	2.46	1.36	.55
April	4.67	1.68	.36
May	2.07	1.06	.51
June	8.35	4.52	.54
July	8.22	5.61	.68
August	.00	.24	--
September	3.60	1.51	.42
Totals	42.52	20.30	0.48

1/ Data unadjusted for sustained low-flow effluents from the shopping center.

Instruments to collect rainfall and runoff data in the Sycamore Creek tributary study area consist of two recording rain gages and two continuous-record stream-gaging stations.

Instruments to collect rainfall, runoff, and flood-profile data in the Dry Branch study area consist of 2 recording rain gages, 1 continuous-record stream-gaging station, 1 crest-stage partial-record station, and 16 flood-profile partial-record gages.

Instruments to collect rainfall, runoff, and flood-profile data in the Little Fossil Creek study area consist of 3 recording rain gages, 1 continuous-record stream-gaging station, 1 crest-stage partial-record station, and 11 flood-profile partial-record gages.

In the Little Fossil Creek and Dry Branch basins, three supplemental crest-stage flood-profile stations are located downstream from the study areas to provide additional floodflow elevations in the vicinity of the gaging stations.

Locations of hydrologic instruments in the study areas are shown on figures 2 and 3. Pertinent individual station information is included in the section "Compilation of data".

DATA COLLECTION AND EXPLANATION

Rainfall

Ten recording rain gages distributed throughout the four study areas provide a measure of total rainfall and are used to define rainfall intensities.

In this report, rainfall is compiled on a daily basis to facilitate comparison with the Environmental Data Service records, comparisons among study-area rain gages, and potential use in mathematical rainfall-runoff models.

Weighted-mean rainfall for a study area is determined by the Thiessen method using gages located within a particular drainage boundary. In some areas, the Thiessen weight values are nearly equal and rainfall amounts are arithmetically averaged. Equations used to compute weighted-mean rainfall for the area above each continuous-record stream-gaging or crest-stage partial-record station are summarized in table 2.

Table 2.--Equations used to compute weighted-mean rainfall for the area above each continuous-record stream-gaging or crest-stage partial-record station

Station	USGS gage identification No.	Weighted-mean rainfall equation
Sycamore Creek at Interstate Highway 35-W	08048520	$(0.33)(1-SC) + (0.48)(2-SC) + (0.19)(3-SC)$
Sycamore Creek tributary above Seminary South Shopping Center	08048530	$(0.78)(1-ST) + (0.22)(2-ST)$
Sycamore Creek tributary at Interstate Highway 35-W	08048540	$(0.56)(1-ST) + (0.44)(2-ST)$
Seminary South Shopping Center	--	$(1.00)(2-ST)$
Dry Branch at Blandin Street	08048550	$(1.00)(1-DB)$
Dry Branch at Fain Street	08048600	$(0.50)(1-DB) + (0.50)(2-DB)$
Little Fossil Creek at Interstate Highway 820	08048820	$(0.76)(1-LF) + (0.24)(2-LF)$
Little Fossil Creek at Mesquite Street	08048850	$(0.34)(1-LF) + (0.25)(2-LF) + (0.41)(3-LF)$

Note: For locations of stations by the U.S. Geological Survey Identification Number, see figs. 2 and 3. Rain gage designations are SC-Sycamore Creek area, ST-Sycamore Creek tributary area, DB-Dry Branch area, and LF-Little Fossil Creek area; for rain gage locations, see figs. 2 and 3.

Runoff

Runoff data are based on discharge measurements and stage records at seven stream-gaging locations and peak elevations at 46 flood-profile locations. Of the seven stream-gaging locations, five are continuous-record stream-gaging stations and two are crest-stage partial-record gaging stations.

A water-stage recorder at a continuous-record stream-gaging station records the full range in stage, which together with measurements of streamflow allows the computation of total runoff at the station.

A water-stage recorder at a crest-stage partial-record gaging station records only stages above a selected elevation, which together with measurements of streamflow allows computation of the upper part of the runoff hydrograph. These stations are located at sites where limited streamflow data collected systematically over a period of years are needed.

A crest-stage flood-profile gage, located at selected sites along the stream or on tributaries, records the peak water stage reached during the passage of a flood.

The purpose of the two continuous-record stream-gaging stations, located in the Sycamore Creek tributary basin (fig. 2), is (1) to collect hydrologic data from the residential-park area west of Seminary South Shopping Center (upstream station), and (2) to collect hydrologic data from both the residential-park area and the shopping center (downstream station). The difference in runoff between these two stations equals the runoff from the impervious area of the shopping center. Sustained low-flow occurs as a result of industrial effluents.

Information on monthly runoff (volumetric) and selected individual storm runoff from the shopping center is presented in later sections of this report. Analyses of an individual storm at the shopping center requires routing the discharge shown by the upstream hydrograph to the downstream station by using estimated travel times of 5 to 50 minutes (depending upon upstream discharge). It is assumed that little or no attenuation of upstream discharge occurs. The routed discharges are deducted from the downstream discharges; these differences equal the discharges (estimated) from the impervious area of the shopping center. Table 1 presents a summary of rainfall-runoff relationships for the current year at Seminary South Shopping Center.

SUMMARY OF DATA FOR THE 1973 WATER YEAR

Each year, storm events that will be useful in achieving the objective of the study are selected for detailed rainfall-runoff analysis. The event during which the annual maximum discharge occurs is usually included in the selection. A digital computer was used to aid in the processing of some of the individual station storm data.

During the 1973 water year, storms selected for analysis occurred on March 10, April 17, June 3-4, and July 28-29, 1973 in the Sycamore Creek basin; April 15, 17, June 3-4, and July 28-29, 1973 in the Sycamore Creek tributary basin; (the storm of April 17 is not included for the Seminary South Shopping Center); March 10, June 3, 19, and July 15, 1973 in the Dry Branch basin; October 21-22, 1972, March 10, and July 15, 1973 in the Little Fossil Creek basin.

Summaries of storm rainfall-runoff data for selected individual storms at streamflow stations and crest-stage partial-record stations are given in tables 3 and 4, respectively. Detailed storm rainfall and runoff records, hydrographs, and mass curves for each station are shown in the section "Compilation of data".

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data, at streamflow stations,
1973 water year

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 17.7 mi ²)								
Mar. 10, 1973	1.8	1.00	0.26	0.51	0.76	0.33	0.33	1,180
April 17, 1973	14	1.36	.35	.55	.96	.67	.49	1,360
June 3-4, 1973	24	4.96	.61	.81	1.08	2.15	.43	2,960
July 28-29, 1973	16	3.21	.41	.70	.85	.65	.20	1,680
08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex. (Drainage area, 0.97 mi ²)								
April 15, 1973	6.0	1.04	.36	.52	.81	.34	.33	308
April 17, 1973	6.5	1.56	.70	.84	1.09	.53	.34	302
June 3-4, 1973	24	5.23	.66	.86	1.28	1.68	.32	370
July 28-29, 1973	8.8	3.98	1.16	1.39	1.66	1.28	.32	395

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data, at streamflow stations,
1973 water year--Continued

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			
08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex. (Drainage area, 1.35 mi ²)								
April 15, 1973	11	1.05	0.32	0.53	0.84	0.45	0.43	513
April 17, 1973	6.8	1.48	.58	.73	1.01	.54	.36	402
June 3-4, 1973	24	5.26	.70	.88	1.27	2.22	.42	756
July 28-29, 1973	8.8	4.11	1.19	1.47	1.72	1.82	.44	882

1-9

Seminary South Shopping Center
(Drainage area, 0.38 mi²)

April 15, 1973	6.3	1.09	.41	.72	.91	.67	.61	227
June 3-4, 1973	24	5.34	.83	1.13	1.44	3.62	.68	413
July 28-29, 1973	9.0	4.43	1.24	1.37	1.55	3.20	.73	489

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data, at streamflow stations
1973 water year--Continued

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048600 Dry Branch at Fain Street, Fort Worth, Tex. (Drainage area, 2.15 mi ²)								
March 10, 1973	2.5	1.44	0.41	0.68	1.02	0.58	0.40	234
June 3, 1973	21	3.30	.82	.92	1.20	1.06	.32	255
June 19, 1973	20	2.31	.60	1.08	1.71	.75	.32	274
July 15, 1973	9.0	2.14	.39	.69	1.01	1.09	.51	256
08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex. (Drainage area, 12.3 mi ²)								
Oct. 21-22, 1972	24	3.34	.42	.73	1.24	.35	.10	561
March 10, 1973	6.8	.94	.26	.42	.67	.35	.37	626
July 15, 1973	15	1.58	.21	.40	.62	.98	.62	1,630

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 4.--Storm rainfall-runoff data, at crest-stage partial-record stations, 1973 water year

Date of Storm	Duration (hours)	Total	Rainfall (inches)			Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
			Maximum increment					
			15-minute	30-minute	60-minute			
08048550 Dry Branch at Blandin Street, Fort Worth, Tex. (Drainage area, 1.08 mi ²)								
March 10, 1973	1.5	1.10	0.40	0.56	0.83	0.20	0.18	105
June 3, 1973	10	3.11	.86	.91	1.04	.94	.30	251
June 19, 1973	19	2.34	.58	.98	1.53	1.08	.46	490
July 15, 1973	8.8	2.15	.35	.68	1.23	1.22	.57	260
08048820 Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. (Drainage area, 5.64 mi ²)								
Oct. 21-22, 1972	26	3.63	.51	1.01	1.56	.59	.16	358
March 10, 1973	5.8	.81	.26	.42	.52	.33	.41	210
July 15, 1973	14	.82	.16	.19	.37	.63	.77	301

Yearly rainfall and runoff for the 1973 water year for the study areas with continuous record-gaging stations in the Fort Worth metropolitan area are summarized in the following table:

Station	Yearly mean rainfall (inches)	Yearly runoff (inches)	Ratio of runoff to rainfall
Sycamore Creek at Inter- state Highway 35-W (08048520)	41.63	9.22	0.22
Sycamore Creek tributary above Seminary South Shopping Center (08048530)	46.76	12.90	.28
Sycamore Creek tributary at Interstate Highway 35-W (08048540)	45.55	14.98	.33
Seminary South Shopping Center	42.52	20.30	.48
Dry Branch at Fain Street (08048600)	45.48	14.17	.31
Little Fossil Creek at Mesquite Street (08048850)	42.69	8.72	.20

NOTE: See "Remarks" paragraph of station descriptions in the section "Compilation of data" for information about regulation or diversion.

Other data, including daily and monthly rainfall and daily and monthly runoff for the 1973 water year, are included in the section "Compilation of data." In addition, flood-profile data for storms during the water year are listed in table 5.

Table 5---Peak elevation of flood-profile partial-record and continuous-record stations, 1973 water year

Map no.	Station no.	Station name and location of floodmark 1/	Drainage area (mi ²)	Distance above mouth (miles) 2/	Flood elevations						
					Oct. 21-22 1972	Oct. 26 1972	March 10 1973	April 17 1973	June 3 1973	June 19 1973	July 15 1973
		<u>Sycamore Creek basin</u>									
1		Sycamore Creek at Sycamore School Road-UsLb	-	11.5	688.20	-	-	690.53	692.82	-	-
2		Sycamore Creek near intersection of Trimble Drive-Hallmark Drive (Hallmark Addition)-Lb	-	10.5	<673.79	-	-	676.49	675.97	-	-
3		Sycamore Creek at Hemphill Street-UsRb	-	9.2	<648.05	-	-	<648.05	648.25	-	-
4		Sycamore Creek tributary at Sycamore Creek Road UsLb	-	-	667.92	-	-	668.89	670.60	-	-
5	08048520*	Sycamore Creek at Interstate Highway 35W-UsLb	17.7	8.7	634.33	-	-	634.65	635.25	-	-
6		Sycamore Creek at Interstate Highway 820-DsRb	-	8.3	626.82	-	-	627.65	630.61	-	-
7		Sycamore Creek at Oak Grove Road-DsLb	-	7.7	615.88	-	-	616.86	619.15	-	-
8		Sycamore Creek below Missouri-Pacific R.R.-1500 ft.-DsLb	-	7.2	605.28	-	-	606.53	609.37	-	-
9		Sycamore Creek at Seminary Drive-UsRb	-	6.3	<587.06	-	-	587.37	588.41	-	-
10		Sycamore Creek at Butler Street (extension) 225 ft.-DsLb	-	5.5	570.83	-	-	<570.06	574.99	-	-
11		Sycamore Creek at Riverside Drive-UsRb	-	4.8	<563.20	-	-	564.70	564.60	-	-
12		Sycamore Creek at Glen Garden Drive-UsRb	-	4.2	<553.08	-	-	<553.08	553.58	-	-
13		Sycamore Creek in Cobb Park midway between Glen Garden Drive and U.S. Highway 287-Lb	-	3.7	<545.32	-	-	<545.32	<545.32	-	-
14		Sycamore Creek at U.S. Highway 287-DsRb	-	3.0	<535.42	-	-	<535.42	538.65	-	-
15		Sycamore Creek at West Rosedale Street-DsRb	-	2.2	<525.68	-	-	<525.68	524.98	-	-
16		Sycamore Creek at Vickery Boulevard-UsLb	-	1.7	<517.23	-	-	<517.23	520.64	-	-
17		Sycamore Creek at Lancaster Avenue-UsLb	-	.9	<506.89	-	-	<506.89	<506.89	-	-
		<u>Dry Branch basin</u>									
1		Dry Branch at Texas and Pacific RR spur-Rb	-	3.41	<596.97	<596.97	<596.97	-	597.32	598.19	597.43
2		Dry Branch at Grace Street-DsLb	-	2.86	587.38	<586.79	587.57	-	588.21	589.19	588.18
3	08048550+	Dry Branch at Blandin Street-24 ft UsLb	1.08	2.82	586.80	586.10	586.50	-	587.56	588.80	587.49
4		Dry Branch at Blandin Street-DsLb	-	2.80	586.63	-	-	-	587.39	588.55	587.43
5		Dry Branch at Hollis Street-60 ft UsRb	-	2.52	583.21	582.37	584.17	-	585.31	587.48	-
6		Dry Branch at Hollis Street-10 ft DsLb	-	2.49	581.01	<580.54	581.50	-	582.36	-	-
7		Dry Branch at Selma Street-120 ft UsLb	-	2.38	580.31	579.67	579.39	-	579.40	581.30	-
8		Dry Branch at Springdale-DsRb	-	2.18	568.64	<568.36	569.64	-	570.46	571.23	-
9		Dry Branch at Bonnie Brae-80 ft UsLb	-	2.07	567.96	567.39	569.06	-	570.18	571.14	-
10		Dry Branch between Bonnie Brae and Aster Court 100 ft-UsRb	-	1.98	565.96	565.43	566.90	-	567.60	569.12	568.48
11		Dry Branch at Carnation Street-20 ft UsRb	-	1.89	562.74	563.33	564.49	-	564.78	566.42	-
12		Dry Branch at Carnation Street-100 ft DsLb	-	1.85	562.33	562.97	563.76	-	564.45	566.19	565.25
13		Dry Branch at Robinwood Street-150 ft UsRb	-	1.65	558.08	<557.68	561.98	-	563.42	565.70	-
14		Dry Branch between Robinwood and Yucca Streets 150 ft-UsLb	-	1.56	-	556.33	557.37	-	557.77	558.64	-
15		Dry Branch between Yucca and Belknap Streets-Rb	-	1.46	554.03	553.72	554.57	-	554.88	-	-
16		Dry Branch at Beach Street-UsLb	-	1.29	544.16	544.52	544.60	-	545.04	545.78	-
17		Dry Branch at Beach Street-DsRb	-	1.23	543.63	543.60	543.72	-	543.89	544.11	-
18	08048600*	Dry Branch at Fain Street-UsRb	2.15	1.08	541.02	540.83	541.61	-	541.80	541.96	541.87
19		Dry Branch at Fain Street-DsRb	-	1.06	540.00	540.00	539.47	-	540.19	540.94	-
20		Dry Branch at State Highway 121-UsLb	-	.99	538.63	539.35	-	-	539.49	539.96	-
		<u>Little Fossil Creek basin</u>									
1		Little Fossil Creek at Cantrell-Samson Roads-DsLb	-	8.42	638.16	637.97	637.75	-	639.36	638.19	638.00
2		Little Fossil Creek at Interstate Highway 820 UsRb	-	7.73	617.71	<616.60	617.91	-	618.30	617.89	617.77
3	08048820+	Little Fossil Creek at Interstate Highway 820 DsRb	5.64	7.55	613.04	612.86	612.23	-	613.76	613.19	612.87
4		Little Fossil Creek at Old Denton Road-DsRb	-	7.14	604.11	603.99	603.08	-	604.58	604.06	603.92
5		Little Fossil Creek at Interstate Highway 35W-UsRb	-	6.35	592.52	<591.16	<591.16	-	592.71	592.89	592.78
6		Little Fossil Creek at Interstate Highway 35W-DsLb	-	6.26	591.59	591.17	590.76	-	591.47	592.18	-
7		Little Fossil Creek at Watauga (Sylvania Avenue) UsLb	-	5.93	585.37	584.94	<588.87	-	585.72	585.78	-
8		Little Fossil Creek midway between Watauga Road and St. Louis Southwestern RR-Rb	-	5.50	<577.56	<577.56	<577.56	-	576.86	<577.56	-
9		Little Fossil Creek at St. Louis Southwestern RR-DsRb	-	5.12	569.32	569.30	568.94	-	570.37	-	571.26
10		Little Fossil Creek tributary at St. Louis Southwestern RR-DsRb	-	-	<573.80	<573.80	<573.80	-	<573.80	-	575.07
11		Little Fossil Creek at Texas & Pacific RR-30 ft DsLb	-	4.54	559.76	<559.43	559.83	-	560.65	-	561.58
12	08048850*	Little Fossil Creek at Mesquite Street-Rb	12.3	4.24	553.99	553.55	554.18	-	a/555.22	553.97	557.40
13		Little Fossil Creek at Beach Street-UsRb	-	4.20	<553.85	<553.85	-	-	555.23	-	557.30
14		Little Fossil Creek at Beach Street-DsRb	-	4.11	551.79	550.30	551.29	-	553.22	-	554.98

1/ Legend to location of floodmark: Ds-downstream; Us-upstream; Lb-left bank; Rb-right bank.

2/ Distances above mouth in Dry Branch basin from the report "Drainage Master Plan for the City of Fort Worth, Public Works Department, Dry Branch Watershed," March 1967, by Knowlton-Ratliff-English, Consulting Engineers.

a/ From floodmark.

† Continuous-record station.

* Crest-stage partial-record station.

< Less than elevation shown.

C O M P I L A T I O N O F D A T A

TRINITY RIVER BASIN

08048520 Sycamore Creek at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°39'55", long 97°19'16", Tarrant County, on left bank at upstream side of bridge on frontage road on upstream side of Interstate Highway 35-W, 5.8 miles (9.3 km) south of Fort Worth City Hall, and 8.9 miles (14.3 km) upstream from mouth.

DRAINAGE AREA.--17.7 mi² (45.8 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,960 ft³/s (83.8 m³/s) June 4, elevation, 637.15 ft (194.20 m); no flow at times.
 Period of record: Maximum discharge, 5,450 ft³/s (154 m³/s) Oct. 19, 1971, elevation, 639.77 ft (195.00 m); no flow at times.
 Flood of May 6, 1969, reached an elevation of 640.1 ft (195.1 m), from floodmarks, discharge, 5,800 ft³/s (164 m³/s). Flood in 1908 reached an elevation of 645.9 ft (196.9 m), and flood in 1938 reached an elevation of 644.4 ft (196.4 m), from information by State Highway Department.

REMARKS.--Records good. Flow is slightly affected by several small farm ponds on tributaries above station. At times, low flow may be sustained by effluents from commercial establishments. Two recording rain gages are operated in basin above this station, and one recording rain gage is located at station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
1	0	82	.45	.30	3.6	2.8	1.0	4.8	.21	.24	15	0				
2	0	9.5	.45	5.8	1.5	2.4	1.8	3.2	.16	.12	9.1	0				
3	0	3.5	.37	26	1.2	2.4	2.8	1.8	537	.10	6.8	0				
4	0	1.6	.24	5.0	1.2	4.4	.70	1.0	482	.06	5.4	0				
5	0	.88	.37	4.0	.85	2.8	.55	5.4	30	.03	3.2	.04				
6	0	9.3	.55	3.6	.70	38	.85	69	14	.03	2.4	42				
7	0	1.4	.30	12	7.6	6.0	2.8	92	8.4	14	1.5	7.6				
8	0	.58	.37	4.8	7.2	4.4	4.7	9.4	5.1	16	.85	.85				
9	0	.43	.37	2.4	6.8	2.8	3.3	5.4	4.0	4.8	.70	.24				
10	0	.22	.55	1.5	6.8	155	1.5	3.6	3.2	.70	.37	.12				
11	0	.16	.45	2.1	7.2	13	.85	2.3	2.8	2.1	.24	.06				
12	0	11	4.9	3.2	6.8	8.4	.70	4.6	4.4	.85	.12	.04				
13	0	21	3.4	6.2	5.7	6.0	6.8	1.9	38	.30	.12	36				
14	0	2.8	8.9	5.3	3.6	5.4	2.1	1.4	34	22	.12	3.2				
15	0	1.4	3.6	4.4	4.0	4.4	128	1.0	8.4	73	.06	.85				
16	0	.87	1.2	3.0	2.8	4.0	33	.99	4.0	5.4	.03	.37				
17	0	.70	.85	2.3	3.2	3.6	286	.45	2.8	2.4	.02	.19				
18	0	19	.70	1.5	3.6	2.8	32	.35	2.1	.85	.02	.15				
19	7.6	3.6	.85	1.1	4.8	2.4	19	.30	41	.45	.02	.12				
20	.19	1.0	.85	1.1	4.8	1.8	8.0	.27	76	.24	.02	.12				
21	23	4.8	.70	4.2	3.2	1.5	5.4	.15	10	.12	.02	.06				
22	117	1.2	.70	.99	14	1.8	5.4	.25	4.4	.10	.01	.02				
23	1.0	.70	.45	.74	8.8	2.8	23	1.3	2.8	.04	0	.06				
24	.30	4.0	.45	.62	5.1	20	205	.35	2.1	.03	0	11				
25	.12	2.8	.37	6.8	3.2	4.0	20	4.1	1.2	.02	0	.55				
26	171	.85	.37	9.5	2.8	2.1	9.5	4.2	.85	.02	0	6.4				
27	16	.55	.30	7.2	2.8	1.5	6.8	.47	.70	.02	0	18				
28	2.8	.45	.30	4.0	2.8	1.2	5.1	.14	.45	158	0	6.0				
29	6.8	.55	.45	2.4	-----	1.0	4.4	.07	.37	148	0	1.0				
30	3.2	.85	.70	2.8	-----	9.0	4.0	.03	.30	174	0	1.0				
31	10	-----	.37	4.4	-----	2.7	-----	.02	-----	46	0	-----				
TOTAL	359.01	187.69	34.88	139.25	126.65	320.4	825.05	220.24	1,320.74	670.02	46.12	136.04				
MEAN	11.6	6.26	1.13	4.49	4.52	10.3	27.5	7.10	44.0	21.6	1.49	4.53				
MAX	171	82	8.9	26	14	155	286	92	537	174	15	42				
MIN	0	.16	.24	.30	.70	1.0	.55	.02	.16	.02	0	0				
CFSM	.66	.35	.06	.25	.26	.58	1.55	.40	2.49	1.22	.08	.26				
IN.	.75	.39	.07	.29	.27	.67	1.73	.46	2.78	1.41	.10	.29				
AC-FT	712	372	69	276	251	636	1,640	437	2,620	1,330	91	270				
(††)	5.88	2.78	.52	2.94	2.14	2.42	4.67	2.22	7.47	6.57	0	4.02				
CAL YR 1972	TOTAL	1,385.29	MEAN	3.78	MAX	250	MIN	0	CFSM	.21	IN	2.91	AC-FT	2,750	††	24.02
WTR YR 1973	TOTAL	4,386.09	MEAN	12.0	MAX	537	MIN	0	CFSM	.68	IN	9.22	AC-FT	8,700	††	41.63

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-22	0045	634.33	1,200	4-24	0645	634.07	1,060
10-26	1515	633.95	1,000	6- 3	0945	635.25	1,680
3-10	0715	634.30	1,180	6- 4	0115	637.15	2,960
4-15	1900	634.24	1,150	7-28	2230	635.25	1,680
4-17	1000	634.65	1,360				

†† Weighted-mean rainfall, in inches, based on three rain gages.

TRINITY RIVER BASIN

08048530 Sycamore Creek tributary above Seminary South Shopping Center, Fort Worth, Tex.

LOCATION.--Lat 32°41'08", long 97°19'44", Tarrant County, on right bank near entrance to culvert under Missouri, Kansas, and Texas Railroad, 0.2 mile (0.3 km) northeast of intersection of Hemphill Street and Seminary Drive in Fort Worth, 1.8 miles (2.9 km) upstream from mouth, and 4.5 miles (7.2 km) south of Fort Worth City Hall.

DRAINAGE AREA.--0.97 mi² (2.51 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and culvert control. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 384 ft³/s (10.9 m³/s) July 28, elevation, 654.04 ft (199.35 m); minimum daily, 0.01 ft³/s (0.28 dm³/s) Oct. 4-10, 15-18, 20.
Period of record: Maximum discharge, 584 ft³/s (16.5 m³/s) Oct. 19, 1971, elevation, 655.49 ft (199.79 m); no flow at times.
Maximum stage since 1966, about 656.0 ft (199.9 m) in August 1966 (discharge not determined), from information by local resident.

REMARKS.--Records fair. Low flow sustained by effluent from commercial establishments above station. One recording rain gage is operated in basin above station, and one is located below station in Seminary South Shopping Center. Records of precipitation and hydrologic data for selected storms are published elsewhere in basic-data reports.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	7.1	.08	.05	.13	.08	.06	.36	.22	.08	.31	.06
2	.05	.19	.10	2.3	.08	.08	1.3	.09	.05	.06	.28	.05
3	.05	.13	.10	3.3	.08	.13	.09	.08	31	.16	.19	.04
4	.01	.13	.06	.13	.06	.10	.10	.08	12	.16	.19	.05
5	.01	.16	.06	.25	.10	.06	.10	1.4	1.8	.08	.13	2.5
6	.01	.85	.06	.52	.10	3.1	.37	6.9	.52	.08	.10	5.6
7	.01	.04	.06	1.5	9.9	.16	.11	.80	.39	1.8	.10	.25
8	.01	.04	.71	.08	1.9	.13	.89	.16	.28	.22	.08	.16
9	.01	.04	.04	.10	.43	.22	.08	.19	.25	.85	.08	.16
10	.01	.04	.50	.13	.31	11	.08	.10	.22	.06	.08	.16
11	.02	.04	.07	.08	.22	.35	.08	.14	.39	.79	.08	.16
12	.02	2.6	1.3	1.2	.19	.25	.08	.26	.31	.06	.06	.16
13	.02	.22	.71	1.5	.16	.22	2.1	.06	4.7	.06	.04	2.6
14	.02	.05	1.4	.28	.13	.19	.85	.05	1.5	2.7	.05	.13
15	.01	.05	.33	.13	.10	.16	8.9	.05	.25	5.8	.05	.06
16	.01	.05	.10	.10	.10	.13	.19	.05	.19	.25	.04	.06
17	.01	.05	.10	.08	.25	.13	14	.05	.16	.13	.05	.05
18	.01	3.2	.10	.08	.13	.10	.99	.13	.16	.10	.08	.04
19	1.9	.08	.08	.08	.10	.16	.73	.06	7.0	.10	.06	.04
20	.01	.06	.08	.79	.10	.13	.31	.04	7.4	.08	.05	.02
21	8.5	1.1	.06	.13	.16	1.8	.35	.02	.35	.08	.05	.02
22	3.1	.05	.05	.08	2.1	.13	.28	.02	.25	.06	.06	.02
23	.04	.05	.05	.10	.28	.39	7.5	.73	.25	.05	.10	.92
24	.02	1.0	.05	.06	.13	2.4	6.6	.19	.16	.05	.10	.47
25	.08	.06	.05	9.3	.10	.13	.47	1.4	.13	.05	.08	.02
26	12	.05	.05	.85	.10	.10	.43	.09	.10	.06	.05	2.7
27	.25	.13	.06	.31	.08	.34	.25	.05	.10	.05	.05	1.8
28	.16	.19	.05	.19	.08	.10	.22	.04	.10	29	.05	.16
29	1.9	.43	.08	.19	-----	.08	.19	.04	.08	4.3	.05	.16
30	.52	.08	.08	.16	-----	1.7	.16	.04	.08	14	.05	.16
31	.52	-----	.05	.57	-----	.07	-----	.06	-----	.67	.13	-----
TOTAL	29.37	18.26	6.67	24.62	17.60	24.12	47.86	13.73	70.39	61.99	2.87	18.78
MEAN	.95	.61	.22	.79	.63	.78	1.60	.44	2.35	2.00	.093	.63
MAX	12	7.1	1.4	9.3	9.9	11	14	6.9	31	29	.31	5.6
MIN	.01	.04	.04	.05	.06	.06	.06	.02	.05	.05	.04	.02
CFSM	.98	.63	.23	.81	.65	.80	1.65	.45	2.42	2.06	.10	.65
IN.	1.13	.70	.26	.94	.67	.93	1.84	.53	2.70	2.38	.11	.72
AC-FT	58	36	13	49	35	48	95	27	140	123	5.7	37
(††)	6.60	2.98	.64	3.55	1.77	2.72	5.13	2.26	8.74	8.25	0	4.12
CAL YR 1972	TOTAL 132.66	MEAN .36	MAX 13	MIN .01	CFSM .37	IN 5.09	AC-FT 263	†† 24.50				
WTR YR 1973	TOTAL 336.26	MEAN .92	MAX 31	MIN .01	CFSM .95	IN 12.90	AC-FT 667	†† 46.76				

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-21	2335	652.98	274	6- 3	0810	653.69	349
3-10	0610	652.85	258	6- 4	0005	653.90	370
4-15	1655	653.28	308	6-19	1935	653.11	290
4-17	0750	653.22	302	7-28	2130	654.04	384
5- 6	2040	652.47	206	7-30	1045	653.13	292
6- 3	0220	653.12	291				

†† Weighted-mean rainfall, in inches, based on two rain gages.

TRINITY RIVER BASIN

08048540 Sycamore Creek tributary at Interstate Highway 35-W, Fort Worth, Tex.

LOCATION.--Lat 32°14'18", long 97°19'11", Tarrant County, on left bank at culvert on downstream side of access road to Interstate Highway 35-W, 0.3 mile (0.5 km) north of Seminary Drive in Fort Worth, 1.2 miles (1.9 km) upstream from mouth, and 4.3 miles (6.9 km) south of Fort Worth City Hall.

DRAINAGE AREA.--1.35 mi² (3.50 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum discharge, 882 ft³/s (25.0 m³/s) July 28, elevation, 627.24 ft (191.18 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) Oct. 15-18.

Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) Oct. 19, 1971, elevation, 628.41 ft (191.54 m); minimum daily, 0.01 ft³/s (0.28 dm³/s) for many days.

Maximum elevation since 1969, that of Oct. 19, 1971. Flood in May 1969 reached an elevation of 627.2 ft (191.2 m), from floodmarks.

REMARKS.--Records fair. Records include runoff from a shopping center. Low flows are sustained by effluents. Two recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	10	.12	.07	.15	.09	.18	.55	.39	.12	.38	.15
2	.07	.32	.09	3.1	.12	.09	1.6	.14	.09	.12	.38	.13
3	.06	.18	.09	4.1	.09	.28	.16	.12	61	.14	.30	.12
4	.04	.15	.09	.17	.09	.14	.12	.12	19	.16	.26	.16
5	.03	.32	.09	.34	.15	.09	.12	2.1	2.3	.15	.21	3.8
6	.07	1.4	.09	.76	.15	5.7	.62	13	.60	.18	.17	10
7	.06	.09	.09	2.0	14	.19	.16	1.2	.52	2.6	.18	.60
8	.03	.08	.68	.16	2.0	.16	1.4	.31	.38	.35	.16	.32
9	.03	.07	.07	.15	.45	.44	.13	.36	.32	1.3	.16	.32
10	.03	.07	.53	.15	.38	18	.11	.17	.32	.14	.15	.32
11	.03	.04	.17	.18	.26	.42	.10	.25	.60	1.2	.15	.32
12	.03	4.9	2.0	1.3	.26	.33	.12	.39	.38	.23	.15	.32
13	.03	.44	.67	1.7	.21	.26	3.7	.12	4.8	.17	.12	5.6
14	.03	.07	2.1	.28	.18	.21	1.3	.12	1.6	5.3	.12	.38
15	.02	.07	.29	.24	.15	.21	16	.12	.32	8.8	.12	.32
16	.02	.07	.12	.16	.12	.18	.59	.14	.26	.47	.09	.26
17	.02	.06	.12	.17	.26	.18	20	.13	.21	.18	.09	.18
18	.02	3.7	.12	.13	.12	.15	1.2	.19	.18	.15	.12	.09
19	3.3	.13	.11	.15	.12	.18	.99	.15	11	.14	.12	.12
20	.03	.10	.09	.86	.12	.18	.40	.12	10	.12	.12	.12
21	17	1.3	.07	.25	.12	1.8	.51	.09	.50	.09	.12	.15
22	5.8	.12	.08	.13	2.9	.12	.37	.07	.33	.09	.14	.15
23	.11	.08	.07	.15	.42	.45	4.3	1.2	.26	.07	.16	1.7
24	.05	1.4	.07	.11	.17	3.2	8.8	.34	.26	.07	.20	.97
25	.07	.14	.07	11	.15	.15	.61	2.3	.18	.07	.15	.18
26	19	.11	.07	1.0	.15	.15	.47	.18	.18	.08	.14	4.1
27	.37	.15	.09	.38	.15	.42	.32	.15	.13	.07	.16	2.5
28	.21	.15	.07	.21	.12	.15	.28	.09	.12	60	.19	.20
29	3.1	.52	.12	.18	-----	.12	.20	.09	.15	5.7	.19	.35
30	.93	.12	.09	.18	-----	3.8	.18	.15	.15	30	.13	.29
31	1.0	-----	.07	.67	-----	.18	-----	.12	-----	1.0	.24	-----
TOTAL	51.72	26.35	8.60	30.43	23.56	38.02	65.04	24.58	116.53	119.26	5.37	34.22
MFAN	1.67	.88	.28	.98	.84	1.23	2.17	.79	3.88	3.85	.17	1.14
MAX	19	10	2.1	11	14	18	20	13	61	60	.38	10
MIN	.02	.04	.07	.07	.09	.09	.10	.07	.09	.07	.09	.09
CFSM	1.24	.65	.21	.73	.62	.91	1.61	.59	2.87	2.85	.13	.84
IN	1.43	.73	.24	.84	.65	1.05	1.79	.68	3.21	3.29	.15	.94
AC-FT	103	52	17	60	47	75	129	49	231	237	11	68
(††)	6.28	2.86	.62	3.33	1.77	2.64	5.00	2.20	8.63	8.24	0	3.98

CAL YR 1972	TOTAL	240.22	MEAN	.66	MAX	24	MIN	.02	CFSM	.49	IN	6.62	AC-FT	476	††	24.03
WTR YR 1973	TOTAL	543.68	MEAN	1.49	MAX	61	MIN	.02	CFSM	1.10	IN	14.98	AC-FT	1,080	††	45.55

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	ELEV.	DISCHARGE	DATE	TIME	ELEV.	DISCHARGE
10-21	2345	623.86	589	6- 3	0230	623.41	522
3- 6	0625	622.15	332	6- 3	0820	625.34	756
3-10	0615	622.79	428	6- 4	0015	625.08	743
4-15	1700	623.35	513	6-19	1945	623.31	506
4-17	0800	622.61	402	7-28	2135	627.24	882
5- 6	2040	622.92	448	7-30	1045	623.37	516

†† Weighted-mean rainfall, in inches, based on two rain gages.

TRINITY RIVER BASIN

08048600 Dry Branch at Fain Street, Fort Worth, Tex.

LOCATION.--Lat 32°46'34", long 97°17'18", Tarrant County, on right bank 30 ft (9 m) upstream from culvert on Fain Street, at intersection of Fain and Beach Streets in Fort Worth, 1.1 miles (1.8 km) upstream from mouth, and 2.9 miles (4.7 km) northeast of Tarrant County Courthouse.

DRAINAGE AREA.--2.15 mi² (5.57 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete culvert control. Datum of gage is 537.51 ft (163.83 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 1.53 ft³/s (43.3 dm³/s), 9.66 in/yr (245.4 mm/yr), 1,110 acre-ft/yr (1.37 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 274 ft³/s (7.76 m³/s) June 19, gage height, 4.45 ft (1.36 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) Sept. 22.

Period of record: Maximum discharge, 352 ft³/s (9.97 m³/s) Oct. 19, 1971, gage height, 5.10 ft (1.55 m); minimum daily, 0.02 ft³/s (0.57 dm³/s) June 25, 1971, June 27, 1972, and Sept. 22, 1973.

Maximum stage since April 1964, 9.0 ft (2.7 m) in April 1966 at upstream side of Fain Street culvert, from information by local resident (discharge not determined).

REMARKS.--Records good above 1.0 ft³/s (28 dm³/s) and fair below. Low flow sustained by effluent from commercial establishments and industry above station. Two recording rain gages are operated in basin above station.

REVISIONS.--WRD Texas 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	14	.13	.22	.77	.61	.15	.22	1.0	.03	.85	.05
2	.08	.83	.13	3.0	.61	.61	1.4	.13	.08	.03	.36	.04
3	.08	.27	.13	11	.59	.58	.53	.13	61	.03	.14	.03
4	.08	.16	.25	.69	.38	.32	.17	.13	15	.03	.13	.33
5	.08	.08	.22	.61	.47	.30	.13	4.1	4.4	.04	.13	3.1
6	.06	.87	.14	.62	.61	14	.37	12	1.5	.05	.13	27
7	.05	.10	.13	4.1	24	1.1	.41	7.2	.61	6.2	.11	1.4
8	.05	.08	.13	.85	6.9	.61	1.2	.79	.39	1.2	.08	.10
9	.05	.07	.13	.38	1.2	.63	.23	1.3	.35	2.7	.13	.05
10	.05	.05	.13	.38	.82	33	.08	.22	.22	.61	.13	.04
11	.05	.05	.17	.68	.61	1.6	.13	.32	.75	15	.13	.05
12	.05	4.9	1.7	.94	.61	.88	.08	.94	.50	.85	.13	.05
13	.05	1.6	.32	.90	.42	.61	1.4	.19	8.5	.56	.13	1.2
14	.05	.18	2.0	.76	.25	.61	4.2	.13	4.3	16	.13	.03
15	.05	.12	.59	.61	.22	.44	15	.13	.61	63	.13	.03
16	.05	.08	.22	.42	.22	.30	1.3	.13	.28	2.6	.20	.03
17	.05	.15	.22	.22	.49	.22	25	.13	.13	1.0	.05	.03
18	.05	5.9	.22	.22	.61	.22	1.8	.13	.10	.38	.05	.03
19	5.5	.33	.22	.22	.36	.22	1.3	.13	43	.38	.05	.03
20	.10	.09	.22	.36	.13	.22	.38	.13	22	.13	.05	.03
21	19	1.5	.22	.90	.13	.22	.39	.13	1.5	.13	.05	.03
22	18	.28	.21	.48	2.7	.22	2.8	.13	.37	.08	.05	.02
23	.24	.22	.08	.38	.94	.34	13	.94	.16	.08	.05	.08
24	.08	1.2	.08	.31	.61	4.1	33	.32	.08	.08	.03	.54
25	.08	.44	.08	19	.61	.22	1.8	5.1	.08	.08	.16	.05
26	34	.13	.08	2.9	.61	.08	.78	.77	.08	.08	.06	2.4
27	1.4	.21	.12	.83	.61	.05	.42	.11	.08	.08	.05	2.7
28	.31	.22	.08	.61	.61	.05	.22	.08	1.9	5.7	.05	.26
29	17	.65	.08	.61	-----	.05	.22	.07	.13	4.4	.05	.06
30	1.8	.27	.19	.50	-----	4.7	.22	.05	.04	24	.05	.05
31	2.8	-----	.22	1.2	-----	.41	-----	.05	-----	1.5	.05	-----
TOTAL	101.37	35.03	8.84	54.90	47.09	67.52	108.11	36.33	169.14	147.03	3.89	39.54
MEAN	3.27	1.17	.29	1.77	1.68	2.18	3.60	1.17	5.64	4.74	.13	1.32
MAX	34	14	2.0	19	24	33	33	12	61	63	.85	27
MIN	.05	.05	.08	.22	.13	.05	.08	.05	.04	.03	.03	.02
CFSM	1.52	.54	.13	.82	.78	1.01	1.67	.54	2.62	2.20	.06	.61
IN.	1.75	.61	.15	.95	.81	1.17	1.87	.63	2.93	2.54	.07	.68
AC-FT	201	69	18	109	93	134	214	72	335	292	7.7	78
(††)	6.88	2.40	.46	2.80	1.79	3.36	4.82	2.40	8.40	8.14	0	4.03

CAL YR 1972	TOTAL	264.89	MEAN	.72	MAX	34	MIN	.02	CFSM	.33	IN	4.58	AC-FT	525	††	20.33
WTR YR 1973	TOTAL	818.79	MEAN	2.24	MAX	63	MIN	.02	CFSM	1.04	IN	14.17	AC-FT	1,620	††	45.48

PEAK DISCHARGE (BASE, 170 FT³/S, REVISED)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-21	2330	3.51	173	6- 3	0230	3.72	194
10-29	0245	3.52	174	6- 3	1015	4.29	255
3-10	0630	4.10	234	6-19	1945	4.45	274
4-17	0900	3.58	180	7-15	0845	4.30	256
4-24	0615	3.82	204	9- 6	1930	3.72	194

†† Weighted-mean rainfall, in inches, based on two rain gages.

TRINITY RIVER BASIN

08048850 Little Fossil Creek at Mesquite Street, Fort Worth, Tex.

LOCATION.--Lat 32°48'33", long 97°17'28", Tarrant County, on right bank at intersection of Mesquite Street and Broadway Avenue in Fort Worth, 150 ft (46 m) upstream from bridge on Alta Vista Road (Beach Street), 4.3 miles (6.9 km) northeast of county courthouse, and approximately 4.3 miles (6.9 km) upstream from Big Fossil Creek.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 548.62 ft (167.22 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 5.57 ft³/s (0.158 m³/s), 6.15 in/yr (156.2 mm/yr), 4,040 acre-ft/yr (4.98 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,630 ft³/s (46.2 m³/s) July 15, gage height, 8.78 ft (2.68 m); no flow Oct. 3-18, Sept. 4.

Period of record: Maximum discharge, 1,630 ft³/s (46.2 m³/s) July 15, 1973, gage height, 8.78 ft (2.68 m); maximum gage height, 8.90 ft (2.71 m) Dec. 9, 1971; no flow at times each year.

Maximum stage since 1955, 10.5 ft (3.2 m), at Alta Vista Road, in September 1962, from information by local resident (discharge not determined). Flood of Mar. 20, 1968, reached a stage of 8.7 ft (2.7 m), discharge, 1,600 ft³/s (45.3 m³/s), from floodmarks at upstream side of Alta Vista Road Bridge.

REMARKS.--Records good. Flow slightly regulated by several small farm ponds located on tributaries above station. Low flow sustained at times by effluent from industrial park 2.6 miles (4.2 km) upstream. Three recording rain gages are operated in basin above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	32	1.3	.42	5.0	2.0	1.5	2.3	.83	2.3	6.6	.04
2	.01	6.6	.83	1.5	3.0	2.3	2.0	1.5	.83	1.7	4.0	.03
3	0	2.6	.83	26	2.0	2.0	2.0	1.3	199	1.5	2.6	.01
4	0	2.0	.83	6.2	1.7	2.0	1.3	1.3	108	1.5	2.3	0
5	0	1.5	.71	3.6	1.3	1.7	.97	4.0	19	1.3	2.0	.13
6	0	1.5	.71	3.0	1.3	39	.71	17	7.6	.97	1.7	20
7	0	1.3	.60	7.5	32	8.0	.71	68	3.0	3.6	1.5	20
8	0	1.1	.60	4.7	62	4.4	.97	6.6	2.1	5.8	1.5	3.0
9	0	.97	.60	2.3	9.0	3.6	1.7	8.0	1.9	3.0	1.1	1.1
10	0	.71	.60	2.0	5.8	116	1.1	4.0	1.7	1.1	.97	.71
11	0	.71	.50	2.0	4.7	11	.83	3.0	1.5	73	.97	.60
12	0	1.1	.97	2.0	4.0	5.8	.71	8.0	1.3	10	.71	.35
13	0	8.5	1.1	2.3	3.3	4.7	4.0	4.0	7.0	5.0	.60	.71
14	0	2.0	1.5	3.3	2.3	4.0	2.3	2.0	5.0	12	.60	.28
15	0	1.3	1.3	3.0	2.0	3.3	22	1.5	4.4	324	.42	.22
16	0	.97	.83	2.6	1.7	3.0	17	1.3	3.6	23	.35	.17
17	0	.97	.71	2.3	1.5	2.3	12	1.1	3.3	9.5	.28	.17
18	0	8.0	.60	2.0	1.5	2.0	8.0	1.1	3.0	5.4	.22	.13
19	2.0	4.4	.60	1.5	1.5	2.0	4.7	1.1	53	4.0	.22	.13
20	.17	2.0	.60	1.3	1.5	1.7	2.6	.83	54	2.6	.22	.13
21	17	.30	.60	3.3	2.3	1.5	1.7	.83	24	2.0	.17	.13
22	00	2.6	.60	1.5	4.4	1.5	6.2	.83	7.0	2.0	.17	.13
23	3.3	1.7	.60	1.3	5.4	1.5	53	5.4	5.0	1.5	.13	.10
24	.83	1.7	.50	1.3	3.6	6.2	246	3.0	4.0	1.3	.10	.22
25	.50	2.3	.50	37	3.0	3.0	15	15	3.3	1.1	.08	.22
26	112	1.7	.50	34	2.3	1.7	7.5	23	3.6	.97	.08	.42
27	17	1.3	.42	8.0	2.0	1.5	4.4	3.3	2.6	.71	.06	6.6
28	3.3	1.1	.42	5.0	2.0	1.3	3.6	1.3	4.4	1.1	.06	2.6
29	32	.97	.42	3.3	-----	1.3	2.6	.83	3.0	9.5	.04	.83
30	5.	1.3	.42	3.0	-----	6.6	2.6	.71	2.3	81	.04	.42
31	5.8	-----	.42	3.6	-----	3.0	-----	.60	-----	21	.08	-----
TOTAL	298.93	95.20	21.72	180.82	172.1	249.9	429.70	192.73	539.26	613.45	29.87	59.58
MEAN	9.64	3.17	.70	5.83	6.15	8.06	14.3	6.22	18.0	19.8	.96	1.99
MAX	112	32	1.5	37	62	116	246	68	199	324	6.6	20
MIN	0	.30	.42	.42	1.3	1.3	.71	.60	.83	.71	.04	0
CFSM	.78	.26	.06	.47	.50	.66	1.16	.51	1.46	1.61	.08	.16
IN.	.90	.29	.07	.55	.52	.76	1.30	.58	1.63	1.86	.09	.18
AC-FT	593	189	43	359	341	496	852	382	1,070	1,220	59	118
(††)	6.71	1.91	.40	2.86	1.59	2.69	4.34	3.80	7.20	7.38	0	3.81
CAL YR 1972 TOTAL	547.63		MEAN 1.50	MAX 112	MIN 0	CFSM .12	IN 1.66	AC-FT 1,090	†† 20.14			
WTR YR 1973 TOTAL	2,883.26		MEAN 7.90	MAX 324	MIN 0	CFSM .64	IN 8.72	AC-FT 5,720	†† 42.69			

PEAK DISCHARGE (BASE, 290 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-22	0030	5.37	561	6- 3	about	a6.60	1,040
10-26	1630	4.93	429		1000		
3-10	0700	5.56	626	6-19	2015	4.95	435
4-24	0600	5.76	704	7-15	0900	8.78	1,630

†† Weighted-mean rainfall, in inches, based on three rain gages.

a From floodmark.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS, 1973 WATER YEAR

Station	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (ft ³ /s)
08048550	Dry Branch at Blandin Street, Fort Worth, Tex. 1/	Lat 32°47'19", long 97°18'22", Tarrant County, at culvert on Blandin Street in north Fort Worth and 2.82 miles upstream from mouth.	1.08	1969-73	6-19-73	588.88	490
08048820	Little Fossil Creek at Interstate Highway 820, Fort Worth, Tex. 1/	Lat 32°50'22", Long 97°19'20", Tarrant County, at culvert on south access road to Interstate Highway 820, 5.7 miles north of Tarrant County courthouse, Fort Worth, and 7.55 miles upstream from mouth.	5.64	1969-73	6-3-73	613.76	586

1/ Equipped with stage-rainfall recorder.

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y													
D A I L Y A N D M O N T H L Y R A I N F A L L S U M M A R Y													
P E R I O D : 1 9 7 3 W A T E R Y E A R													
G A G E N U M B E R													
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DR	2-DR	1-LF	2-LF	3-LF			
OCT													
18	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
19	0.50	0.65	0.64	0.63	0.41	0.70	0.45	0.35	0.42	0.53			
21	2.45	2.57	2.35	2.22	2.10	2.79	1.96	3.28	3.31	2.56			
22	0.40	0.16	0.30	0.39	0.45	0.32	0.44	0.35	0.31	0.37			
26	2.05	2.06	1.95	2.84	2.00	2.05	2.18	2.03	2.14	1.94			
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.09	0.03			
29	0.16	0.25	0.24	0.56	0.23	0.69	1.48	0.30	0.35	0.87			
30	0.05	0.18	0.04	0.19	0.15	0.38	0.22	0.17	0.24	0.33			
31	0.12	0.08	0.30	0.09	0.13	0.03	0.06	0.04	0.05	0.03			
MTOT	5.73	6.00	5.82	6.92	5.47	6.96	6.79	6.62	6.91	6.66			
NOV													
1	0.78	0.89	0.93	1.05	0.89	0.70	1.18	0.30	0.50	0.65			
5	0.10	0.15	0.19	0.07	0.10	0.00	0.00	0.00	0.00	0.00			
6	0.30	0.20	0.10	0.18	0.10	0.07	0.07	0.09	0.10	0.07			
12	0.62	0.76	0.58	0.57	0.55	0.42	0.57	0.50	0.57	0.41			
17	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.04	0.00	0.00			
18	0.60	0.45	0.39	0.54	0.54	0.45	0.58	0.51	0.47	0.44			
21	0.16	0.19	0.17	0.45	0.16	0.19	0.10	0.20	0.19	0.17			
24	0.15	0.19	0.19	0.15	0.16	0.14	0.13	0.10	0.14	0.11			
29	0.05	0.04	0.04	0.09	0.05	0.12	0.04	0.08	0.07	0.06			
MTOT	2.76	2.87	2.59	3.10	2.55	2.14	2.67	1.82	2.04	1.91			
DEC													
10	0.00	0.00	0.04	0.00	0.04	0.06	0.03	0.06	0.06	0.05			
12	0.22	0.28	0.15	0.36	0.28	0.18	0.20	0.16	0.15	0.17			
14	0.25	0.30	0.28	0.30	0.26	0.24	0.15	0.11	0.17	0.12			
30	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.00	0.03			
MTOT	0.47	0.58	0.47	0.66	0.58	0.55	0.38	0.40	0.38	0.40			
CTOT	23.52	24.45	23.82	24.97	22.83	21.14	19.53	21.58	20.53	18.70			
MTOT=MONTHLY TOTALS													
CTOT=CALENDAR YEAR TOTALS													

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DR=DRY BRANCH
LF=LITTLE FOSSIL CREEK

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y													
D A I L Y A N D M O N T H L Y R A I N F A L L S U M M A R Y													
P E R I O D : 1973 W A T E R Y E A R													
G A G E N U M B E R													
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF			
JAN													
2	0.68	0.63	0.62	0.76	0.56	0.65	0.43	0.66	0.74	0.55			
3	0.41	0.40	0.30	0.63	0.38	0.45	0.50	0.45	0.44	0.45			
6	0.05	0.08	0.04	0.06	0.10	0.06	0.05	0.10	0.08	0.02			
7	0.05	0.10	0.14	0.00	0.00	0.09	0.22	0.08	0.03	0.15			
12	0.00	0.00	0.04	0.00	0.00	0.05	0.20	0.07	0.11	0.05			
13	0.40	0.25	0.03	0.35	0.25	0.05	0.10	0.07	0.05	0.05			
20	0.08	0.06	0.09	0.15	0.14	0.06	0.05	0.07	0.14	0.10			
25	1.35	1.35	1.24	1.80	1.25	1.24	1.19	1.20	1.22	1.20			
31	0.08	0.10	0.09	0.02	0.08	0.17	0.05	0.20	0.24	0.14			
MTOT	3.10	2.97	2.58	3.77	2.76	2.82	2.79	2.90	3.05	2.71			
FEB													
7	1.77	1.57	1.33	1.30	1.38	1.50	1.39	1.19	1.21	1.24			
8	0.04	0.03	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00			
17	0.05	0.07	0.04	0.11	0.07	0.09	0.04	0.05	0.10	0.08			
22	0.45	0.43	0.40	0.30	0.34	0.26	0.30	0.30	0.30	0.28			
26	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
MTOT	2.38	2.10	1.81	1.76	1.79	1.85	1.73	1.55	1.61	1.60			
MAR													
3	0.05	0.06	0.08	0.00	0.00	0.00	0.00	0.03	0.08	0.02			
6	0.40	0.48	0.32	0.45	0.34	0.96	0.83	0.59	0.77	0.85			
9	0.05	0.07	0.03	0.07	0.09	0.10	0.05	0.21	0.14	0.04			
10	0.95	1.05	0.98	1.08	1.05	1.10	1.77	0.78	0.89	1.11			
23	0.08	0.12	0.06	0.15	0.10	0.08	0.04	0.07	0.09	0.05			
24	0.45	0.44	0.53	0.54	0.45	0.34	0.42	0.42	0.35	0.33			
30	0.18	0.40	0.28	0.50	0.43	0.58	0.42	0.15	0.49	0.55			
MTOT	2.17	2.62	2.33	2.79	2.46	3.16	3.55	2.25	2.81	2.99			
MTOT=MONTHLY TOTALS													

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DB=DRY BRANCH
LF=LITTLE FOSSIL CREEK

FORT WORTH URBAN HYDROLOGY STUDY

PERIOD : 1973 WATER YEAR

DAILY AND MONTHLY RAINFALL SUMMARY

G A G E N U M B E R

DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF
APR										
2	0.04	0.06	0.11	0.11	0.15	0.08	0.11	0.10	0.12	0.05
6	0.09	0.05	0.09	0.12	0.11	0.10	0.03	0.04	0.04	0.05
8	0.25	0.23	0.19	0.25	0.20	0.09	0.16	0.16	0.24	0.10
13	0.25	0.17	0.20	0.45	0.40	0.09	0.20	0.50	0.33	0.05
14	0.20	0.19	0.23	0.24	0.21	0.30	0.72	0.19	0.10	0.15
15	1.02	1.14	1.18	1.02	1.09	0.75	0.87	1.05	0.86	0.71
17	1.30	1.40	1.36	1.63	1.30	1.04	0.84	0.34	0.37	0.40
19	0.05	0.11	0.14	0.09	0.06	0.11	0.10	0.00	0.00	0.05
21	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.24	0.25	0.25
23	0.68	0.54	0.71	0.70	0.58	0.94	0.77	1.75	1.55	1.10
24	0.68	0.73	0.74	0.65	0.57	1.08	0.65	0.53	0.54	0.83
MTOT	4.56	4.62	4.98	5.26	4.67	4.88	4.75	4.90	4.40	3.83
MAY										
1	0.00	0.00	0.04	0.06	0.08	0.00	0.00	0.00	0.00	0.00
5	0.39	0.32	0.29	0.42	0.35	0.48	0.39	0.36	0.48	0.42
6	0.99	1.18	0.94	1.02	0.98	1.12	0.85	1.05	1.29	1.10
8	0.00	0.00	0.00	0.04	0.04	0.20	0.12	0.20	0.52	0.13
11	0.20	0.10	0.00	0.10	0.04	0.12	0.10	0.62	0.25	0.12
12	0.05	0.04	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00
23	0.03	0.04	0.03	0.20	0.11	0.15	0.10	0.89	0.66	0.23
24	0.55	0.34	0.02	0.08	0.11	0.12	0.05	0.39	0.30	0.17
25	0.25	0.21	0.28	0.37	0.32	0.61	0.40	0.97	0.91	0.70
MTOT	2.46	2.29	1.63	2.31	2.07	2.80	2.01	4.48	4.41	2.87
JUN										
1	0.08	0.11	0.17	0.08	0.05	0.11	0.18	0.09	0.11	0.10
3	4.74	5.10	4.60	5.15	5.27	3.11	3.50	2.60	3.00	3.75
4	0.11	0.06	0.06	0.05	0.07	0.68	0.30	0.45	1.07	0.20
5	0.21	0.21	0.25	0.30	0.30	0.28	0.28	0.25	0.22	0.18
11	0.04	0.03	0.12	0.08	0.05	0.06	0.06	0.03	0.04	0.07
12	0.21	0.26	0.10	0.10	0.05	0.25	0.07	0.12	0.17	0.02
13	0.78	0.72	0.53	0.80	0.70	0.68	0.58	1.14	0.66	0.62
14	0.00	0.00	0.00	0.00	0.00	0.25	0.15	0.40	0.30	0.20
19	0.83	1.04	0.84	1.14	1.05	2.34	2.29	1.14	1.72	1.86
20	0.17	0.24	0.58	1.15	0.81	0.58	0.47	0.15	0.12	0.19
28	0.00	0.00	0.00	0.00	0.00	0.27	0.30	0.05	0.03	0.47
MTOT	7.17	7.77	7.25	8.85	8.35	8.61	8.18	6.42	7.52	7.66

MTOT=MONTHLY TOTALS

SC=SYCAMORE CREEK
ST=SYCAMORE CREEK TRIBUTARY
DR=DRY BRANCH

F O R T W O R T H U R B A N H Y D R O L O G Y S T U D Y												
D A I L Y A N D M O N T H L Y R A I N F A L L S U M M A R Y												
P E R I O D : 1973 W A T E R Y E A R												
G A G E N U M B E R												
DATE	1-SC	2-SC	3-SC	1-ST	2-ST	1-DB	2-DB	1-LF	2-LF	3-LF		
JUL												
7	0.80	0.82	0.37	0.44	0.40	0.56	0.81	0.40	0.60	0.43		
8	0.00	0.02	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.29	0.03	0.17	0.14	0.19	0.23	0.00	0.00	0.15		
11	0.20	0.15	0.27	0.23	0.17	1.29	0.83	1.80	2.25	1.30		
12	0.00	0.00	0.00	0.00	0.00	0.06	0.07	0.00	0.00	0.00		
14	0.88	0.60	0.72	0.65	0.72	1.48	1.27	0.93	0.85	1.00		
15	0.55	0.37	0.40	1.15	0.80	2.15	2.13	0.70	1.18	2.55		
16	0.00	0.00	0.00	0.10	0.07	0.00	0.00	0.00	0.00	0.00		
28	3.05	2.75	2.56	3.55	4.04	0.67	0.95	0.60	0.91	0.64		
29	0.35	0.42	0.40	0.30	0.39	0.14	0.21	0.15	0.17	0.17		
30	1.25	1.10	1.06	1.66	1.46	1.71	1.52	1.84	2.03	1.56		
MTOT	7.08	6.52	5.81	8.26	8.22	8.25	8.02	6.42	7.99	7.80		
AUG												
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
MTOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
SEPT												
4	0.05	0.06	0.00	0.05	0.02	0.00	0.00	0.03	0.02	0.04		
5	0.60	0.64	0.36	0.67	0.65	0.75	0.66	0.69	0.78	0.70		
6	0.73	1.00	1.00	0.83	0.92	2.28	2.24	1.76	1.72	1.90		
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00		
13	1.18	1.03	0.66	0.75	0.61	0.22	0.21	0.03	0.06	0.15		
23	0.30	0.46	0.53	0.37	0.32	0.15	0.13	0.06	0.10	0.13		
24	0.00	0.00	0.18	0.06	0.10	0.00	0.00	0.00	0.00	0.00		
26	0.70	0.70	0.57	0.90	0.60	0.50	0.42	1.25	0.52	0.47		
27	0.33	0.30	0.28	0.53	0.30	0.27	0.23	0.25	0.22	0.26		
29	0.00	0.07	0.07	0.11	0.08	0.00	0.00	0.00	0.00	0.00		
MTOT	3.89	4.26	3.65	4.27	3.60	4.17	3.89	4.15	3.61	3.65		
WTOT	41.77	42.60	38.92	47.95	42.52	46.19	44.76	41.91	44.73	42.08		

MTOT=MONTHLY TOTALS

WTOT=WATER YEAR TOTAL

SC=SYCAMORE CREEK

ST=SYCAMORE CREEK TRIBUTARY

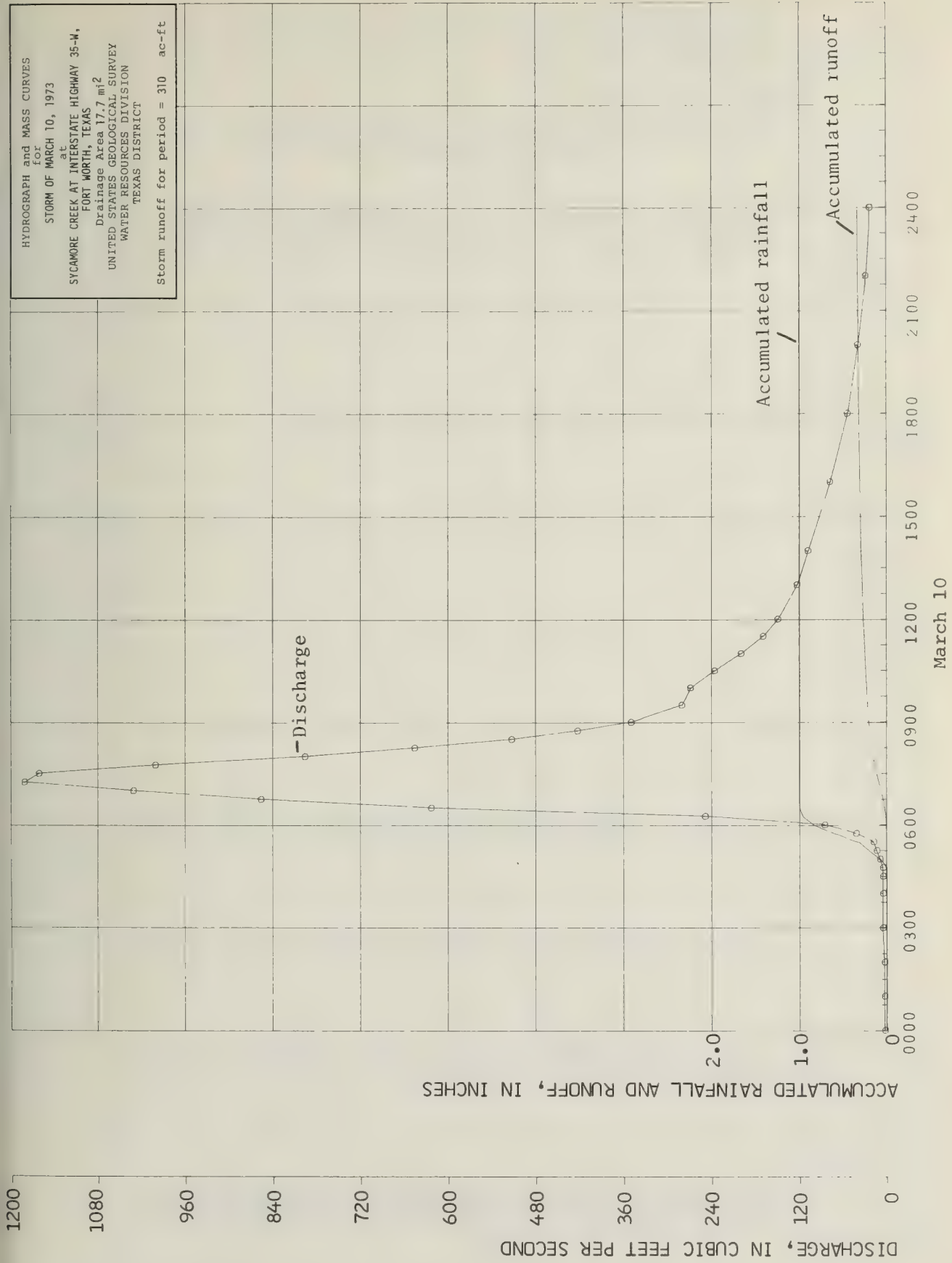
DB=DRY BRANCH

LF=LITTLE FOSSIL CREEK

STA. NO. 08048520		STORM RAINFALL AND RUNOFF RECORD												
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX.		STORM OF MARCH 10, 1973												
DATE & TIME	G A G E N U M B E R										DISCHARGE IN	ACCUM. PRECIP. IN.	FT ³ /S	IN.
	1-SC	2-SC	3-SC											
MAR. 10														
0000	0.0	0.0	0.0									0.0	2.8	0.0001
0100	0.0	0.0	0.0									0.0	3.2	0.0004
0200	0.0	0.0	0.0									0.0	3.2	0.0007
0300	0.0	0.0	0.0									0.0	5.4	0.0012
0400	0.0	0.0	0.0									0.0	5.4	0.0015
0430	0.0	0.0	0.0									0.0	5.4	0.0017
0445	0.0	0.0	0.0									0.0	5.4	0.0018
0500	0.10	0.05	0.11									0.08	9.5	0.0020
0515	0.27	0.15	0.23									0.20	14.0	0.0023
0530	0.30	0.33	0.32									0.32	18.0	0.0027
0545	0.50	0.62	0.63									0.58	42.0	0.0037
0600	0.80	0.85	0.83									0.83	85.0	0.0055
0615	0.94	1.00	0.80									0.96	248.0	0.0110
0630	0.95	1.05	0.95									1.00	622.0	0.0247
0645	0.95	1.05	0.93									1.00	855.0	0.0435
0700	0.95	1.05	0.93									1.00	1030.0	0.0662
0715	0.95	1.05	0.93									1.00	1180.0	0.0921
0730	0.95	1.05	0.98									1.00	1160.0	0.1177
0745	0.95	1.05	0.98									1.00	1000.0	0.1397
0800	0.95	1.05	0.98									1.00	795.0	0.1572
0815	0.95	1.05	0.98									1.00	645.0	0.1714
0830	0.95	1.05	0.98									1.00	512.0	0.1826
0845	0.95	1.05	0.98									1.00	422.0	0.1919
0900	0.95	1.05	0.93									1.00	349.0	0.2035
0930	0.95	1.05	0.98									1.00	280.0	0.2158
1000	0.95	1.05	0.98									1.00	268.0	0.2276
1030	0.95	1.05	0.98									1.00	235.0	0.2379
1100	0.95	1.05	0.98									1.00	199.0	0.2467
1130	0.95	1.05	0.98									1.00	169.0	0.2541
1200	0.95	1.05	0.98									1.00	149.0	0.2640
1300	0.95	1.05	0.98									1.00	123.0	0.2748
1400	0.95	1.05	0.98									1.00	108.0	0.2891
1600	0.95	1.05	0.98									1.00	78.0	0.3028
1800	0.95	1.05	0.98									1.00	54.0	0.3123
2000	0.95	1.05	0.98									1.00	40.0	0.3193
2200	0.95	1.05	0.98									1.00	29.0	0.3245
2400	0.95	1.05	0.98									1.00	23.0	0.3265

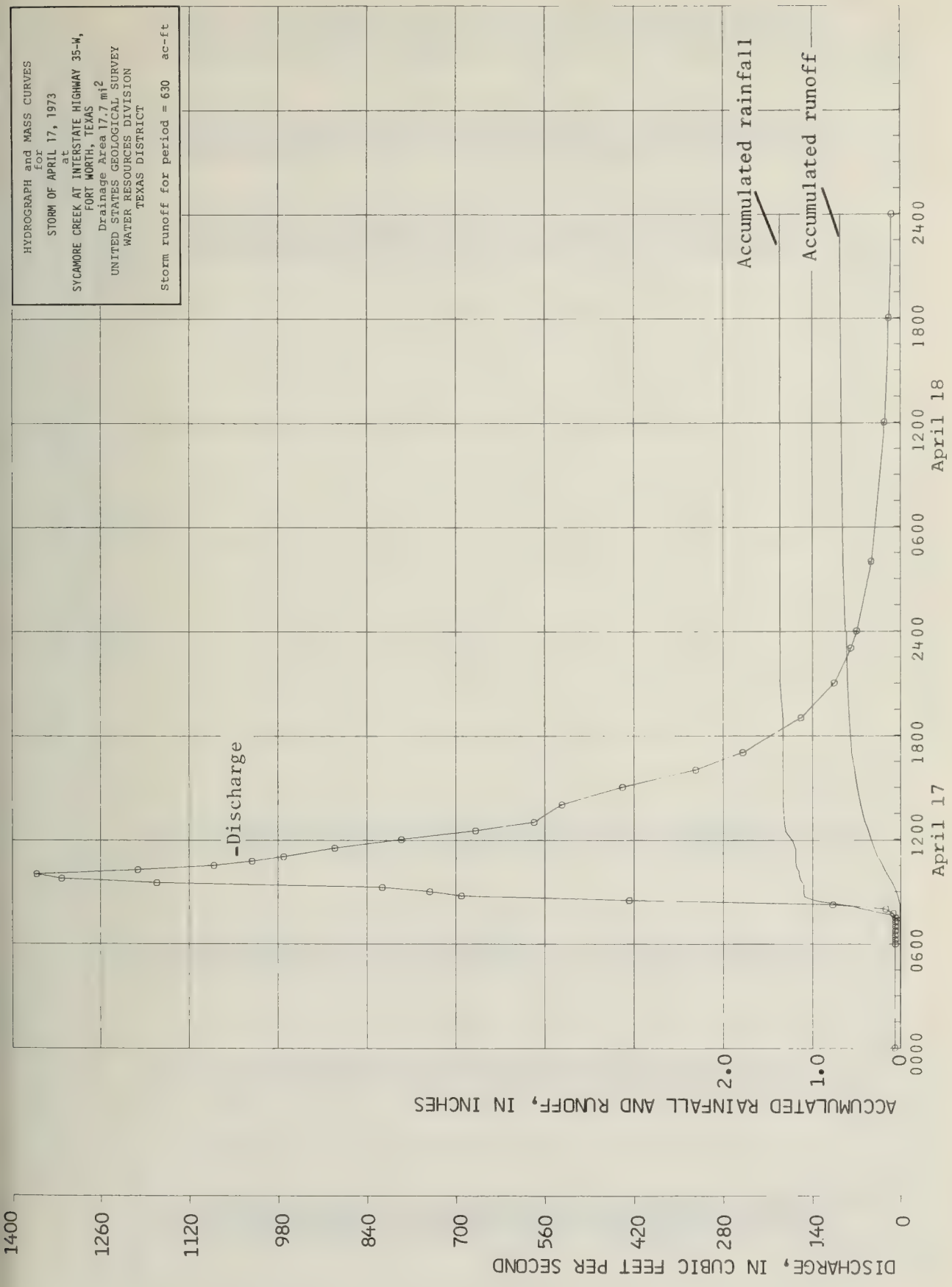
HYDROGRAPH and MASS CURVES
for
STORM OF MARCH 10, 1973
at
SYCAMORE CREEK AT INTERSTATE HIGHWAY 35-W,
FORT WORTH, TEXAS
Drainage Area 17.7 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 310 ac-ft



STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX.									
STORM OF APRIL 17 1973									
DATE & TIME	G A G E				ACCUM. WEIGHTED PRECIP.	DISCHARGE IN	1973 WATER YEAR		
	1-SC	2-SC	3-SC				FT ³ /S	IN.	IN.
APR. 17									
0000	0.0	0.0	0.0		0.0		10.0	0.0026	
0600	0.0	0.0	0.0		0.0		8.8	0.0051	
0615	0.0	0.0	0.0		0.0		8.8	0.0053	
0630	0.0	0.0	0.0		0.0		8.8	0.0054	
0645	0.0	0.0	0.0		0.0		8.8	0.0056	
0700	0.0	0.0	0.0		0.0		8.4	0.0058	
0715	0.0	0.0	0.0		0.0		8.4	0.0060	
0730	0.12	0.02	0.0		0.05		8.4	0.0062	
0745	0.23	0.08	0.10		0.13		12.0	0.0065	
0800	0.47	0.32	0.33		0.37		24.0	0.0070	
0815	0.74	0.50	0.45		0.57		107.0	0.0093	
0830	0.92	1.06	0.56		0.92		426.0	0.0187	
0845	0.98	1.15	1.12		1.09		690.0	0.0339	
0900	0.99	1.15	1.14		1.10		740.0	0.0502	
0915	1.00	1.15	1.14		1.10		815.0	0.0681	
0930	1.00	1.15	1.14		1.10		1170.0	0.0939	
0945	1.01	1.21	1.14		1.13		1320.0	0.1229	
1000	1.05	1.21	1.15		1.15		1360.0	0.1529	
1015	1.07	1.21	1.15		1.15		1200.0	0.1793	
1030	1.08	1.24	1.20		1.18		1080.0	0.2031	
1045	1.08	1.25	1.20		1.18		1020.0	0.2255	
1100	1.08	1.25	1.20		1.18		970.0	0.2575	
1130	1.12	1.25	1.20		1.18		890.0	0.2967	
1200	1.12	1.30	1.20		1.22		785.0	0.3313	
1230	1.20	1.35	1.33		1.30		668.0	0.3607	
1300	1.20	1.37	1.36		1.31		576.0	0.3987	
1400	1.20	1.40	1.36		1.33		532.0	0.4456	
1500	1.20	1.40	1.36		1.33		437.0	0.4840	
1600	1.20	1.40	1.36		1.33		322.0	0.5124	
1700	1.20	1.40	1.36		1.33		248.0	0.5451	
1900	1.20	1.40	1.36		1.33		157.0	0.5728	
2100	1.30	1.40	1.36		1.36		105.0	0.5913	
2300	1.30	1.40	1.36		1.36		79.0	0.6017	
2400	1.30	1.40	1.36		1.36		70.0	0.6048	
APR. 18									
0000	1.30	1.40	1.36		1.36		70.0	0.6171	
0400	1.30	1.40	1.36		1.36		47.0	0.6419	
1200	1.30	1.40	1.36		1.36		26.0	0.6580	
1800	1.30	1.40	1.36		1.36		19.0	0.6680	
2400	1.30	1.40	1.36		1.36		14.0	0.6717	

HYDROGRAPH and MASS CURVES
 for
 STORM OF APRIL 17, 1973
 at
 SYCAMORE CREEK AT INTERSTATE HIGHWAY 35-W,
 FORT WORTH, TEXAS
 Drainage Area 17.7 mi²
 UNITED STATES GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 TEXAS DISTRICT
 Storm runoff for period = 630 ac-ft



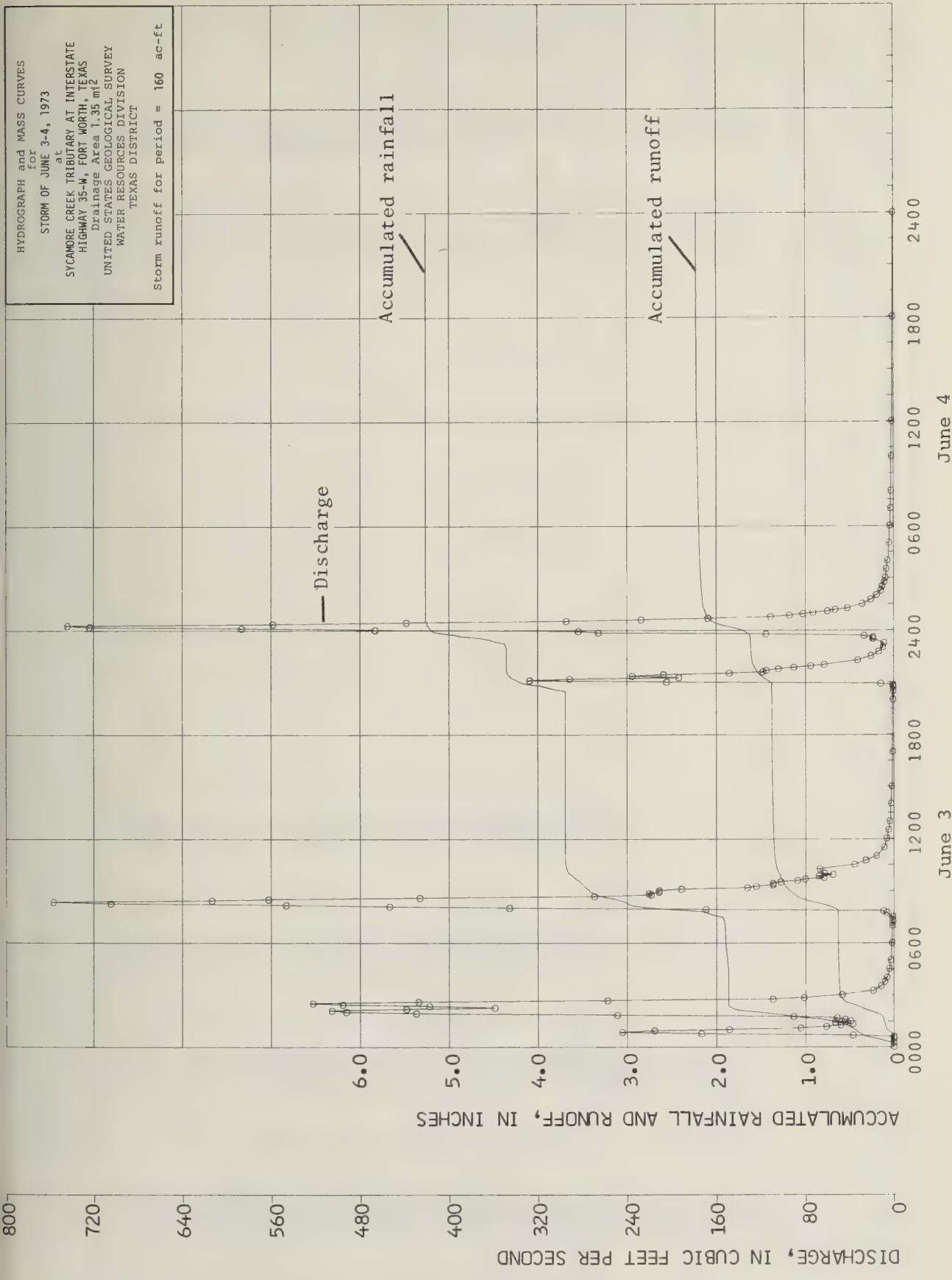
STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF JUNE 3-4, 1973									
STA. NO. 09048520									
1973 WATER YEAR									
DATE & TIME	G A G E				ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE		ACCUM. RUNOFF	IN.
	1-SC	2-SC	3-SC			IN	FT ³ /S		
JUNE 3									
0000	0.0	0.0	0.0		0.0	0.1	0.0000		0.0000
0015	0.0	0.0	0.0		0.0	0.1	0.0000		0.0000
0030	0.30	0.28	0.0		0.23	0.1	0.0000		0.0000
0045	0.57	0.68	0.32		0.58	11.0	0.0002		0.0002
0100	0.67	0.76	0.38		0.66	12.0	0.0005		0.0005
0115	0.80	0.91	0.52		0.80	23.0	0.0010		0.0010
0130	0.88	0.98	0.57		0.87	32.0	0.0017		0.0017
0145	1.24	1.60	1.13		1.39	47.0	0.0028		0.0028
0200	1.45	1.75	1.25		1.56	163.0	0.0063		0.0063
0215	1.73	1.98	1.51		1.81	627.0	0.0201		0.0201
0230	1.75	1.98	1.52		1.82	915.0	0.0403		0.0403
0245	1.75	1.98	1.52		1.82	1060.0	0.0636		0.0636
0300	1.75	1.98	1.52		1.82	1100.0	0.0878		0.0878
0315	1.75	1.98	1.52		1.82	1080.0	0.1116		0.1116
0330	1.75	1.98	1.52		1.82	1010.0	0.1338		0.1338
0345	1.75	1.98	1.52		1.82	895.0	0.1535		0.1535
0400	1.75	1.98	1.52		1.82	744.0	0.1699		0.1699
0415	1.75	1.98	1.52		1.82	564.0	0.1823		0.1823
0430	1.75	1.98	1.52		1.82	419.0	0.1915		0.1915
0445	1.75	1.98	1.52		1.82	322.0	0.1986		0.1986
0500	1.75	1.98	1.52		1.82	263.0	0.2073		0.2073
0530	1.75	1.98	1.52		1.82	187.0	0.2155		0.2155
0600	1.75	1.98	1.52		1.82	140.0	0.2248		0.2248
0700	1.75	1.98	1.52		1.82	127.0	0.2332		0.2332
0730	1.75	2.00	1.58		1.84	114.0	0.2369		0.2369
0745	1.82	2.17	2.11		2.04	110.0	0.2394		0.2394
0800	2.43	2.87	2.48		2.65	163.0	0.2430		0.2430
0815	2.48	2.93	2.57		2.71	316.0	0.2499		0.2499
0830	2.73	3.15	2.68		2.92	776.0	0.2670		0.2670
0845	2.93	3.30	2.83		3.09	1210.0	0.2936		0.2936
0900	2.96	3.32	2.83		3.11	1440.0	0.3253		0.3253
0915	3.00	3.35	2.90		3.15	1580.0	0.3601		0.3601
0930	3.05	3.40	2.93		3.20	1650.0	0.3964		0.3964
0945	3.12	3.47	3.02		3.27	1680.0	0.4334		0.4334
1000	3.16	3.51	3.03		3.30	1620.0	0.4690		0.4690
1015	3.20	3.54	3.05		3.33	1500.0	0.5021		0.5021
1030	3.22	3.55	3.05		3.35	1360.0	0.5320		0.5320
1045	3.22	3.55	3.05		3.35	1260.0	0.5597		0.5597
1100	3.22	3.55	3.05		3.35	1190.0	0.5990		0.5990

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STORM OF JUNE 3-4, 1973									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX.									
DATE & TIME	G A G E			PRECIP.	DISCHARGE		ACCUM.	IN.	
	1-SC	2-SC	3-SC		IN	FT ³ /S		IN.	IN.
JUNE 3									
1130	3.22	3.55	3.05			1010.0	3.35		0.6435
1200	3.22	3.55	3.05			860.0	3.35		0.7003
1300	3.22	3.55	3.05			600.0	3.35		0.7531
1400	3.22	3.55	3.05			496.0	3.35		0.7968
1500	3.22	3.55	3.05			402.0	3.35		0.8322
1600	3.22	3.55	3.05			331.0	3.35		0.8613
1700	3.22	3.55	3.05			263.0	3.35		0.8845
1800	3.22	3.55	3.05			209.0	3.35		0.9121
2000	3.22	3.55	3.05			130.0	3.35		0.9264
2030	3.22	3.55	3.05			114.0	3.35		0.9301
2045	3.63	3.77	3.30			109.0	3.63		0.9325
2100	3.97	4.03	3.41			134.0	3.89		0.9355
2115	4.08	4.14	3.62			169.0	4.02		0.9392
2130	4.16	4.26	3.74			225.0	4.13		0.9442
2145	4.18	4.28	3.77			444.0	4.15		0.9539
2200	4.18	4.28	3.77			758.0	4.15		0.9706
2215	4.18	4.28	3.77			950.0	4.15		0.9915
2230	4.18	4.28	3.77			1100.0	4.15		1.0157
2245	4.18	4.28	3.77			1130.0	4.15		1.0406
2300	4.20	4.32	3.77			1060.0	4.18		1.0639
2315	4.25	4.35	3.89			935.0	4.23		1.0845
2330	4.37	4.62	4.02			850.0	4.42		1.1032
2345	4.55	4.95	4.35			880.0	4.70		1.1226
2400	4.74	5.10	4.60			1060.0	4.89		1.1343
JUNE 4									
0000	4.74	5.10	4.60			1060.0	4.89		1.1459
0015	4.85	5.12	4.60			1510.0	4.93		1.1792
0030	4.85	5.16	4.66			2190.0	4.96		1.2274
0045	4.85	5.16	4.66			2700.0	4.96		1.2868
0100	4.85	5.16	4.66			2950.0	4.96		1.3517
0115	4.85	5.16	4.66			2960.0	4.96		1.4169
0130	4.85	5.16	4.66			2730.0	4.96		1.4770
0145	4.85	5.16	4.66			2390.0	4.96		1.5296
0200	4.85	5.16	4.66			2030.0	4.96		1.5966
0230	4.85	5.16	4.66			1630.0	4.96		1.6684
0300	4.85	5.16	4.66			1420.0	4.96		1.7621
0400	4.85	5.16	4.66			1080.0	4.96		1.8572
0500	4.85	5.16	4.66			758.0	4.96		1.9240
0600	4.85	5.16	4.66			524.0	4.96		1.9701
0700	4.85	5.16	4.66			377.0	4.96		2.0033

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 09048520									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF JUNE 3-4, 1973									
DATE & TIME	G A G E N U M B E R			PRECIP. IN.	FT ³ /S	DISCHARGE IN	ACCUM. WEIGHTED IN.	DISCHARGE IN	ACCUM. RUNOFF IN.
	1-SC	2-SC	3-SC						
JUNE 4									
0900	4.85	5.16	4.66				4.96	288.0	2.0413
1000	4.85	5.16	4.66				4.96	189.0	2.0746
1200	4.85	5.16	4.66				4.96	128.0	2.0971
1400	4.85	5.16	4.66				4.96	90.0	2.1130
1600	4.85	5.16	4.66				4.96	68.0	2.1309
2000	4.85	5.16	4.66				4.96	43.0	2.1461
2400	4.85	5.16	4.66				4.96	34.0	2.1521

HYDROGRAPH and MASS CURVES
for
STORM OF JUNE 3-4, 1973
at
SYCAMORE CREEK TRIBUTARY AT INTERSTATE
HIGHWAY 35-W, FORT WORTH, TEXAS
Drainage Area 1.35 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 160 ac-ft



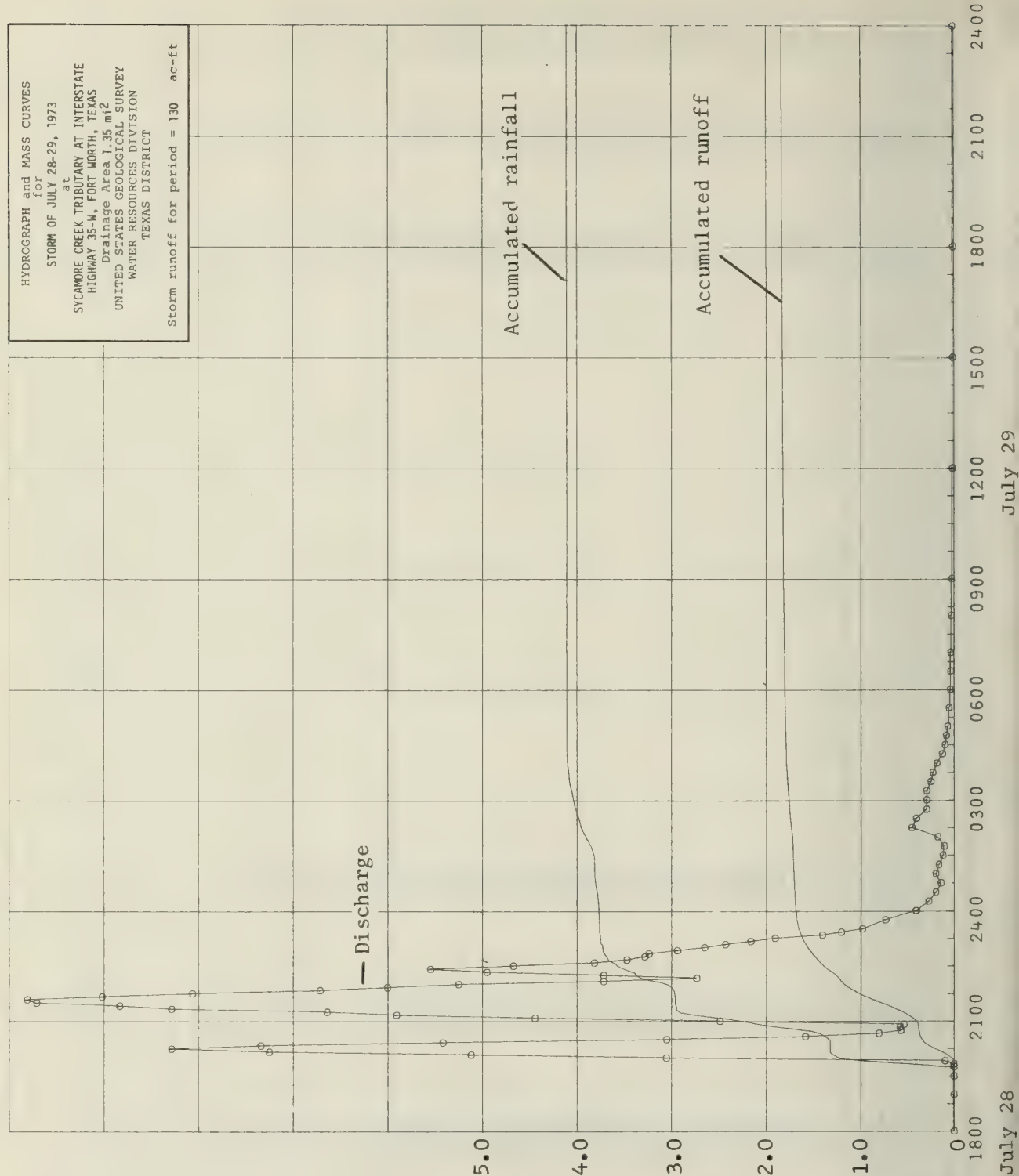
STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF JULY 28-29, 1973									
DATE & TIME	1-SC	2-SC	3-SC	G A G E	N U M B E R	PRECIP.	ACCUM. WEIGHTED IN.	DISCHARGE IN	ACCUM. RUNOFF
							IN.	FT ³ /S	IN.
JULY 28									
0000	0.0	0.0	0.0				0.0	0.0	0.0
1300	0.0	0.0	0.0				0.0	0.0	0.0
1315	0.0	0.0	0.0				0.0	0.0	0.0
1330	0.05	0.0	0.0				0.02	0.0	0.0
1400	0.06	0.15	0.18				0.13	0.1	0.0000
1445	0.06	0.15	0.20				0.13	0.0	0.0000
1500	0.40	0.15	0.20				0.24	0.0	0.0000
1515	0.68	0.22	0.20				0.37	0.1	0.0000
1530	0.75	0.25	0.20				0.41	0.1	0.0000
1545	0.87	0.27	0.20				0.45	0.1	0.0000
1600	0.89	0.40	0.23				0.53	0.1	0.0000
1900	0.89	0.40	0.25				0.53	0.1	0.0000
1915	0.89	0.40	0.25				0.53	0.1	0.0000
1930	1.00	0.42	0.25				0.58	0.1	0.0001
1945	1.19	1.15	0.25				0.99	0.1	0.0001
2000	1.19	1.20	1.00				1.16	40.0	0.0009
2015	1.19	1.20	1.07				1.17	56.0	0.0022
2030	1.26	1.20	1.10				1.20	132.0	0.0051
2045	1.65	1.57	1.10				1.51	225.0	0.0100
2100	2.08	2.00	1.32				1.90	364.0	0.0180
2115	2.04	2.10	1.59				2.00	500.0	0.0290
2130	2.04	2.10	1.88				2.05	865.0	0.0481
2145	2.12	2.16	1.88				2.09	1310.0	0.0769
2200	2.32	2.22	1.96				2.20	1470.0	0.1093
2215	2.55	2.40	2.21				2.41	1590.0	0.1443
2230	2.90	2.62	2.33				2.66	1680.0	0.1812
2245	2.99	2.71	2.47				2.76	1600.0	0.2165
2300	2.99	2.72	2.53				2.77	1450.0	0.2484
2315	3.00	2.73	2.53				2.78	1260.0	0.2761
2330	3.01	2.74	2.55				2.79	1140.0	0.3012
2345	3.02	2.75	2.55				2.80	1050.0	0.3243
2400	3.05	2.75	2.56				2.81	935.0	0.3346
JULY 29									
0000	3.05	2.75	2.56				2.81	935.0	0.3449
0015	3.05	2.77	2.56				2.82	825.0	0.3631
0030	3.09	2.86	2.59				2.88	744.0	0.3794
0045	3.11	2.88	2.59				2.90	659.0	0.3939
0100	3.12	2.89	2.70				2.93	564.0	0.4064
0115	3.12	2.89	2.71				2.93	472.0	0.4167
0130	3.12	2.89	2.71				2.93	398.0	0.4255

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048520									
SYCAMORE CREEK AT INTERSTATE HWY 35-W, FORT WORTH, TEX. STORM OF JULY 28-29, 1973									
DATE & TIME	G A G E			N U M B E R			A C C U M .		
	1-SC	2-SC	3-SC	1	2	3	WEIGHTED PRECIP. IN.	DISCHARGE IN	FT3/S IN.
JULY 29									
0145	3.12	2.90	2.71				2.94	361.0	0.4335
0200	3.15	2.91	2.77				2.96	337.0	0.4409
0215	3.16	3.00	2.77				3.01	316.0	0.4478
0230	3.20	3.02	2.85				3.05	305.0	0.4545
0245	3.23	3.06	2.87				3.08	295.0	0.4610
0300	3.26	3.09	2.92				3.11	288.0	0.4674
0315	3.29	3.11	2.93				3.14	288.0	0.4737
0330	3.31	3.13	2.94				3.15	298.0	0.4836
0400	3.33	3.15	2.96				3.17	305.0	0.4936
0415	3.37	3.15	2.96				3.19	298.0	0.5002
0430	3.38	3.17	2.96				3.20	285.0	0.5096
0500	3.40	3.17	2.96				3.21	268.0	0.5214
0530	3.40	3.17	2.96				3.21	240.0	0.5320
0600	3.40	3.17	2.96				3.21	215.0	0.5462
0700	3.40	3.17	2.96				3.21	185.0	0.5624
0800	3.40	3.17	2.96				3.21	151.0	0.5757
0900	3.40	3.17	2.96				3.21	125.0	0.5867
1000	3.40	3.17	2.96				3.21	100.0	0.5999
1200	3.40	3.17	2.96				3.21	71.0	0.6124
1400	3.40	3.17	2.96				3.21	52.0	0.6216
1600	3.40	3.17	2.96				3.21	40.0	0.6304
1900	3.40	3.17	2.96				3.21	36.0	0.6383
2100	3.40	3.17	2.96				3.21	28.0	0.6445
2400	3.40	3.17	2.96				3.21	22.0	0.6474

DISCHARGE, IN CUBIC FEET PER SECOND

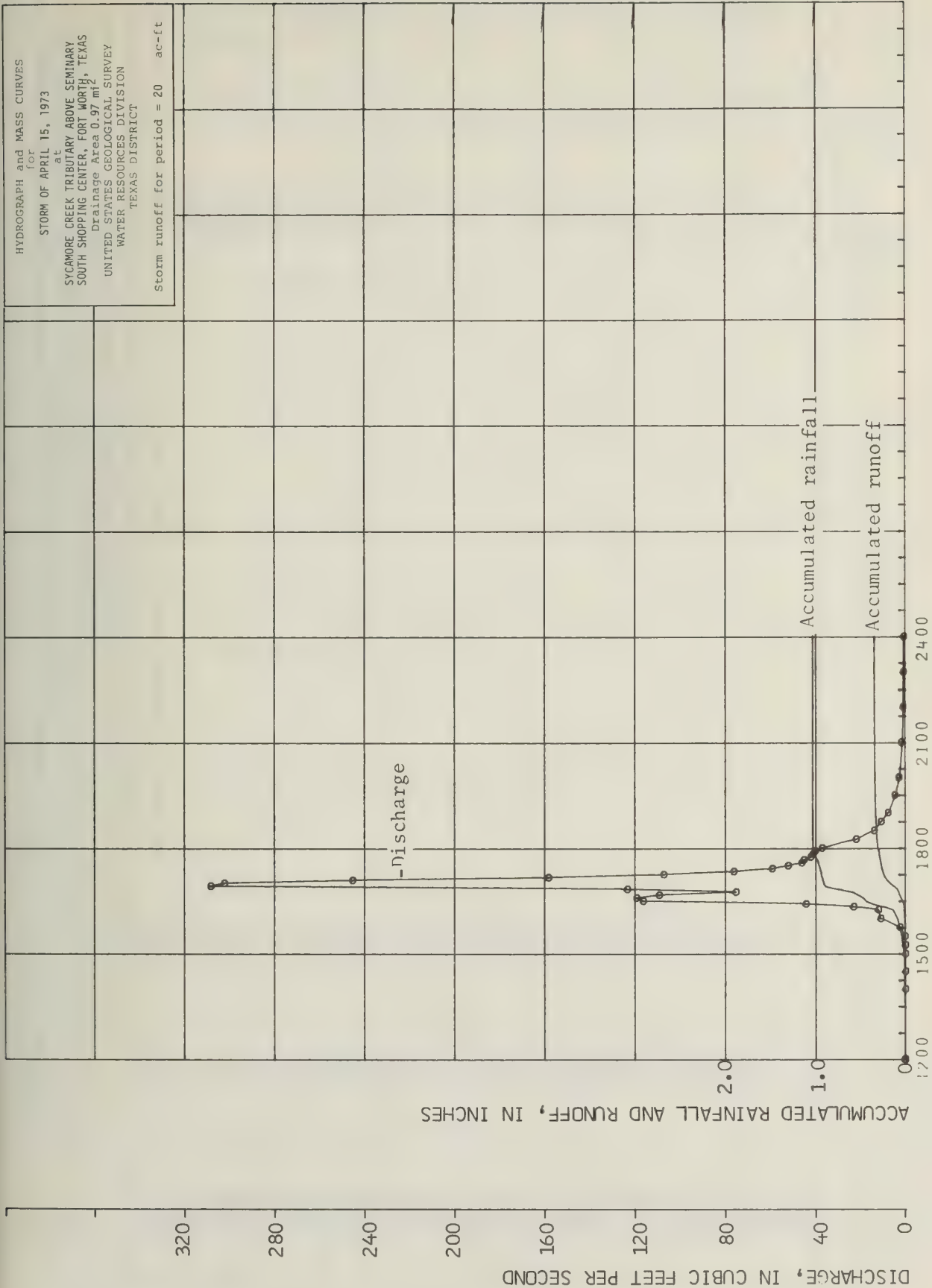
900
810
720
630
540
450
360
270
180
90
0

ACCUMULATED RAINFALL AND RUNOFF, IN INCHES



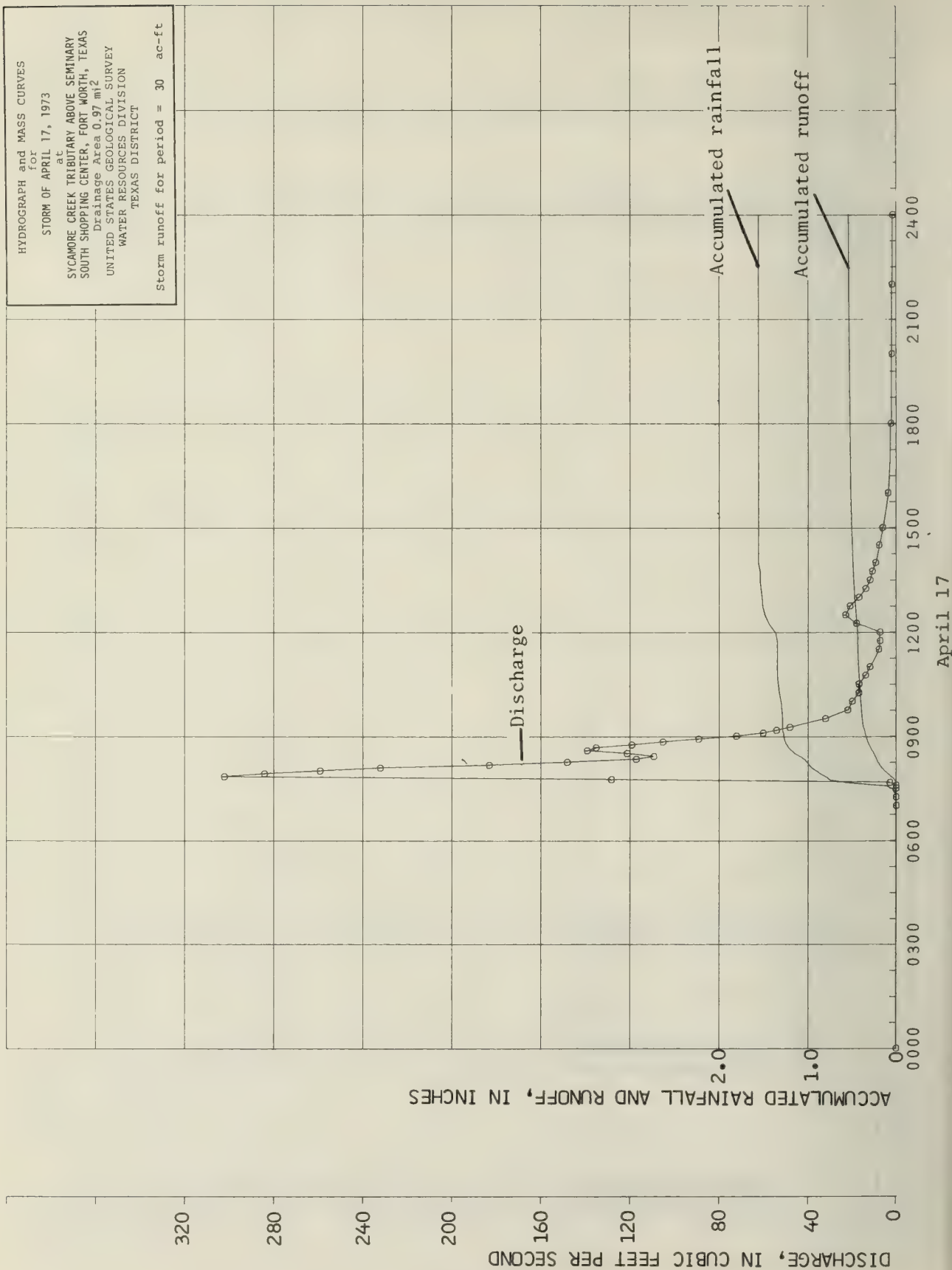
STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
SYCAMORE CR TRIB ABV SEM. S. SHOP. CENTER, FT WORTH, TEX STORM OF APRIL 15, 1973									
DATE & TIME	G A G E N U M B E R				WEIGHTED PRECIP. IN.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.		
	1-ST	2-ST							
APR. 15									
0000	0.0	0.0			0.0	0.6	0.0005		
0100	0.0	0.0			0.0	0.4	0.0013		
0300	0.0	0.0			0.0	0.2	0.0021		
0700	0.0	0.0			0.0	0.1	0.0028		
1200	0.0	0.02			0.00	0.1	0.0032		
1400	0.02	0.02			0.02	0.1	0.0033		
1430	0.02	0.02			0.02	0.1	0.0033		
1500	0.02	0.03			0.02	0.1	0.0034		
1515	0.04	0.04			0.04	0.1	0.0034		
1530	0.05	0.05			0.05	0.3	0.0035		
1545	0.07	0.08			0.07	2.5	0.0045		
1600	0.10	0.09			0.10	11.0	0.0099		
1615	0.13	0.20			0.15	12.0	0.0121		
1620	0.17	0.42			0.22	23.0	0.0151		
1625	0.33	0.49			0.37	44.0	0.0210		
1630	0.42	0.53			0.44	116.0	0.0364		
1635	0.45	0.54			0.47	119.0	0.0523		
1640	0.47	0.74			0.53	109.0	0.0668		
1645	0.49	0.92			0.58	75.0	0.0768		
1650	0.66	0.95			0.72	123.0	0.0931		
1655	0.87	0.97			0.89	308.0	0.1341		
1700	0.89	0.98			0.91	302.0	0.1744		
1705	0.90	0.99			0.92	245.0	0.2070		
1710	0.91	1.00			0.93	158.0	0.2280		
1715	0.92	1.01			0.94	107.0	0.2422		
1720	0.92	1.02			0.94	76.0	0.2524		
1725	0.93	1.03			0.95	59.0	0.2602		
1730	0.94	1.03			0.96	52.0	0.2671		
1735	0.95	1.04			0.97	46.0	0.2733		
1740	0.96	1.06			0.98	45.0	0.2793		
1745	0.98	1.07			1.00	42.0	0.2848		
1750	0.99	1.08			1.01	41.0	0.2903		
1755	1.01	1.08			1.03	40.0	0.2956		
1800	1.02	1.09			1.04	37.0	0.3055		
1815	1.02	1.09			1.04	22.0	0.3143		
1830	1.02	1.09			1.04	14.0	0.3199		
1845	1.02	1.09			1.04	11.0	0.3242		
1900	1.02	1.09			1.04	7.9	0.3290		
1930	1.02	1.09			1.04	4.9	0.3329		

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0A048530									
SYCAMORE CR TRIB ABV SEW. S. SHOP. CENTER, FT WORTH, TEX STORM OF APRIL 15, 1973									
DATE & TIME	GAGE		N U M B E R	PRECIP.		ACCUM. WEIGHTED IN.	DISCHARGE		IN.
	1-ST	2-ST		1	IN.		FT ³ /S	IN.	
APR. 15									
2000	1.02	1.09			1.04		3.1		0.3366
2100	1.02	1.09			1.04		1.8		0.3395
2200	1.02	1.09			1.04		1.1		0.3412
2300	1.02	1.09			1.04		0.9		0.3427
2400	1.02	1.09			1.04		0.7		0.3433



STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048530									
SYCAMORE CK TRIB ABV SEM. S. SHOP. CENTER, FT WORTH, TEX STORM OF APRIL 17, 1973									
DATE & TIME	G A G E			N U M B E R	ACCUM.		DISCHARGE		
	1-ST	2-ST			WEIGHTED PRECIP. IN.		IN	FT ³ /S	IN.
APR. 17									
0000	0.0	0.0			0.0		0.1	0.0004	0.0004
0700	0.0	0.0			0.0		0.1	0.0009	0.0009
0715	0.0	0.0			0.0		0.1	0.0009	0.0009
0730	0.07	0.0			0.05		0.1	0.0010	0.0010
0735	0.15	0.02			0.12		0.1	0.0010	0.0010
0740	0.57	0.16			0.48		3.0	0.0014	0.0014
0745	0.88	0.29			0.75		128.0	0.0184	0.0184
0750	0.91	0.35			0.79		302.0	0.0586	0.0586
0755	0.98	0.41			0.85		284.0	0.0964	0.0964
0800	1.02	0.45			0.89		259.0	0.1309	0.1309
0805	1.08	0.49			0.95		232.0	0.1618	0.1618
0810	1.11	0.52			0.98		183.0	0.1862	0.1862
0815	1.13	0.56			1.00		148.0	0.2059	0.2059
0820	1.16	0.60			1.04		117.0	0.2214	0.2214
0825	1.19	0.68			1.08		109.0	0.2359	0.2359
0830	1.23	0.82			1.14		121.0	0.2520	0.2520
0835	1.25	0.92			1.18		139.0	0.2706	0.2706
0840	1.27	1.01			1.21		135.0	0.2885	0.2885
0845	1.29	1.03			1.23		119.0	0.3044	0.3044
0850	1.31	1.05			1.25		105.0	0.3183	0.3183
0855	1.32	1.07			1.26		89.0	0.3302	0.3302
0900	1.33	1.08			1.27		72.0	0.3398	0.3398
0905	1.33	1.08			1.27		60.0	0.3478	0.3478
0910	1.34	1.09			1.28		54.0	0.3550	0.3550
0915	1.34	1.10			1.29		48.0	0.3677	0.3677
0930	1.34	1.10			1.29		32.0	0.3805	0.3805
0945	1.35	1.10			1.29		22.0	0.3893	0.3893
1000	1.36	1.11			1.30		20.0	0.3973	0.3973
1015	1.38	1.12			1.32		17.0	0.4041	0.4041
1030	1.39	1.14			1.33		17.0	0.4109	0.4109
1045	1.40	1.15			1.34		14.0	0.4165	0.4165
1100	1.40	1.15			1.34		12.0	0.4236	0.4236
1130	1.40	1.15			1.34		7.9	0.4284	0.4284
1145	1.40	1.15			1.34		7.3	0.4313	0.4313
1200	1.42	1.17			1.36		7.3	0.4342	0.4342
1215	1.50	1.22			1.44		18.0	0.4414	0.4414
1230	1.55	1.25			1.48		23.0	0.4506	0.4506
1245	1.58	1.26			1.51		21.0	0.4590	0.4590
1300	1.59	1.26			1.52		17.0	0.4658	0.4658

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048530									
SYCAMORE CK TRIB ABV SEM. S. SHOP. CENTER, FT WORTH, TEX STORM OF APRIL 17, 1973									
DATE & TIME	G A G E		N U M B E R		ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE IN		ACCUM. RUNOFF IN.	
	1-ST	2-ST				FT ³ /S			
APR. 17									
1315	1.60	1.28			1.53	14.0		0.4714	
1330	1.61	1.29			1.54	12.0		0.4761	
1345	1.61	1.29			1.54	11.0		0.4805	
1400	1.63	1.30			1.56	9.5		0.4862	
1430	1.63	1.30			1.56	7.9		0.4925	
1500	1.63	1.30			1.56	6.3		0.5001	
1600	1.63	1.30			1.56	3.9		0.5094	
1800	1.63	1.30			1.56	2.6		0.5177	
2000	1.63	1.30			1.56	2.1		0.5245	
2200	1.63	1.30			1.56	1.9		0.5305	
2400	1.63	1.30			1.56	1.7		0.5332	



STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STATION NO. 08048530									
SYCAMORE CK TRIB ABV SEM. S. SHOP. CENTER, FT WORTH, TEX STORM OF JUNE 3-4, 1973									
DATE & TIME	G A G E				PRECIP. IN.	DISCHARGE IN			
	1-ST	2-ST				FT ³ /S			IN.
JUNE 3									
0000	0.0	0.0			0.0	0.0			0.0000
0015	0.0	0.0			0.0	0.0			0.0000
0030	0.32	0.04			0.26	0.0			0.0000
0035	0.37	0.14			0.32	0.0			0.0000
0040	0.40	0.26			0.37	14.0			0.0019
0045	0.42	0.30			0.39	81.0			0.0127
0050	0.44	0.33			0.42	74.0			0.0225
0055	0.46	0.38			0.44	63.0			0.0309
0100	0.47	0.39			0.45	47.0			0.0372
0105	0.50	0.41			0.48	38.0			0.0422
0110	0.53	0.44			0.51	29.0			0.0461
0115	0.56	0.47			0.54	23.0			0.0492
0120	0.60	0.49			0.58	22.0			0.0521
0125	0.69	0.51			0.65	27.0			0.0557
0130	0.79	0.52			0.73	29.0			0.0595
0135	0.91	0.58			0.84	30.0			0.0635
0140	1.01	0.69			0.94	41.0			0.0690
0145	1.17	0.89			1.11	65.0			0.0776
0150	1.22	1.12			1.20	111.0			0.0924
0155	1.26	1.36			1.28	152.0			0.1127
0200	1.47	1.44			1.46	187.0			0.1376
0205	1.69	1.45			1.64	165.0			0.1595
0210	1.76	1.75			1.76	100.0			0.1728
0215	1.78	1.86			1.80	152.0			0.1931
0220	1.79	1.91			1.82	291.0			0.2318
0225	1.79	1.95			1.83	272.0			0.2680
0230	1.79	1.96			1.83	179.0			0.2918
0235	1.79	1.96			1.83	105.0			0.3058
0240	1.79	1.96			1.83	72.0			0.3154
0245	1.79	1.96			1.83	54.0			0.3226
0250	1.79	1.96			1.83	43.0			0.3312
0300	1.79	1.96			1.83	21.0			0.3382
0315	1.79	1.96			1.83	13.0			0.3434
0330	1.79	1.96			1.83	8.3			0.3467
0345	1.79	1.96			1.83	6.1			0.3491
0400	1.79	1.96			1.83	4.2			0.3516
0430	1.79	1.96			1.83	2.9			0.3539
0500	1.80	1.97			1.84	2.1			0.3565
0600	1.82	1.99			1.86	1.2			0.3584

STORM RAINFALL AND RUNOFF RECORD										1973 WATER YEAR		
STA. NO. 08048530												
SYCAMORE CK TRIB ARV SEM. S. SHOP. CENTER, FT WORTH, TEX STORM OF JUNE 3-4, 1973												
DATE & TIME	G A G E				N U M B E R				WEIGHTED PRECIP. IN.	DISCHARGE IN	ACCU. IN	RUNOFF ACCU. IN
	1-ST	2-ST										
JUNE 3												
0700	1.83	2.00							1.87	0.8	0.3592	
0715	1.84	2.00							1.88	0.8	0.3595	
0730	1.86	2.01							1.89	0.8	0.3598	
0745	2.17	2.02							2.14	3.5	0.3607	
0750	2.19	2.03							2.15	21.0	0.3635	
0755	2.31	2.37							2.32	142.0	0.3824	
0800	2.62	2.64							2.62	159.0	0.4036	
0805	2.79	2.86							2.81	247.0	0.4365	
0810	2.81	3.09							2.87	349.0	0.4829	
0815	2.84	3.15							2.91	341.0	0.5283	
0820	2.88	3.16							2.94	329.0	0.5721	
0825	2.93	3.19							2.99	311.0	0.6135	
0830	3.01	3.21							3.05	188.0	0.6386	
0835	3.10	3.23							3.13	158.0	0.6596	
0840	3.21	3.29							3.23	115.0	0.6749	
0845	3.29	3.34							3.30	122.0	0.6911	
0850	3.34	3.37							3.35	124.0	0.7077	
0855	3.39	3.38							3.39	122.0	0.7239	
0900	3.40	3.44							3.41	109.0	0.7384	
0905	3.41	3.45							3.42	89.0	0.7503	
0910	3.45	3.46							3.45	75.0	0.7602	
0915	3.46	3.48							3.46	65.0	0.7689	
0920	3.47	3.49							3.47	60.0	0.7769	
0925	3.50	3.50							3.50	54.0	0.7841	
0930	3.52	3.52							3.52	50.0	0.7907	
0935	3.53	3.53							3.53	46.0	0.7969	
0940	3.57	3.55							3.57	45.0	0.8028	
0945	3.58	3.58							3.58	43.0	0.8086	
0950	3.59	3.60							3.60	43.0	0.8143	
0955	3.62	3.61							3.62	42.0	0.8199	
1000	3.65	3.64							3.65	42.0	0.8311	
1015	3.66	3.69							3.67	42.0	0.8478	
1030	3.66	3.72							3.67	28.0	0.8590	
1045	3.66	3.73							3.68	19.0	0.8666	
1100	3.66	3.73							3.68	14.0	0.8750	
1130	3.66	3.73							3.68	9.0	0.8822	
1200	3.66	3.73							3.68	6.1	0.8871	
1230	3.66	3.73							3.68	4.5	0.8907	
1300	3.66	3.73							3.68	3.5	0.8944	

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
SYCAMORE CK TRIB ABV SEM. S. SHOP. CENTER, FT WORTH, TEX STORM OF JUNE 3-4, 1973									
DATE & TIME	G A G E N U M B E R				WEIGHTED		DISCHARGE		ACCUM. RUNOFF
	1-ST	2-ST			PRFCIP. IN.	FT ³ /S	IN.		
JUNE 3									
1400	3.66	3.73			3.68	2.5		0.8988	
1500	3.66	3.73			3.68	1.9		0.9034	
1700	3.66	3.73			3.68	1.4		0.9090	
2000	3.66	3.73			3.68	1.0		0.9118	
2030	3.66	3.73			3.68	1.0		0.9123	
2045	4.08	3.73			4.00	1.0		0.9126	
2050	4.12	3.79			4.05	1.0		0.9127	
2055	4.19	4.04			4.16	23.0		0.9158	
2100	4.24	4.14			4.22	142.0		0.9347	
2105	4.26	4.17			4.24	148.0		0.9544	
2110	4.27	4.24			4.26	112.0		0.9693	
2115	4.28	4.30			4.28	112.0		0.9842	
2120	4.30	4.31			4.30	113.0		0.9993	
2125	4.32	4.33			4.32	99.0		1.0124	
2130	4.33	4.35			4.33	80.0		1.0231	
2135	4.34	4.36			4.34	71.0		1.0325	
2140	4.34	4.36			4.34	66.0		1.0413	
2145	4.34	4.37			4.35	61.0		1.0495	
2150	4.34	4.37			4.35	53.0		1.0565	
2155	4.34	4.37			4.35	47.0		1.0628	
2200	4.34	4.37			4.35	41.0		1.0737	
2215	4.34	4.37			4.35	21.0		1.0821	
2230	4.34	4.37			4.35	15.0		1.0881	
2245	4.34	4.37			4.35	12.0		1.0929	
2300	4.34	4.37			4.35	9.3		1.0966	
2315	4.36	4.39			4.37	8.1		1.0998	
2330	4.69	4.43			4.63	11.0		1.1027	
2335	4.79	4.50			4.73	11.0		1.1042	
2340	5.02	4.66			4.94	22.0		1.1071	
2345	5.07	4.77			5.00	111.0		1.1219	
2350	5.14	4.97			5.10	196.0		1.1480	
2355	5.14	5.19			5.15	283.0		1.1857	
2400	5.15	5.27			5.18	355.0		1.2093	
JUNE 4									
0000	5.15	5.27			5.18	355.0		1.2329	
0005	5.15	5.29			5.18	370.0		1.2822	
0010	5.15	5.31			5.19	363.0		1.3305	
0015	5.17	5.31			5.20	354.0		1.3776	
0020	5.20	5.31			5.22	340.0		1.4229	
0025	5.20	5.31			5.22	243.0		1.4552	

STA. NO. 08048530

JUN 3-4 1973

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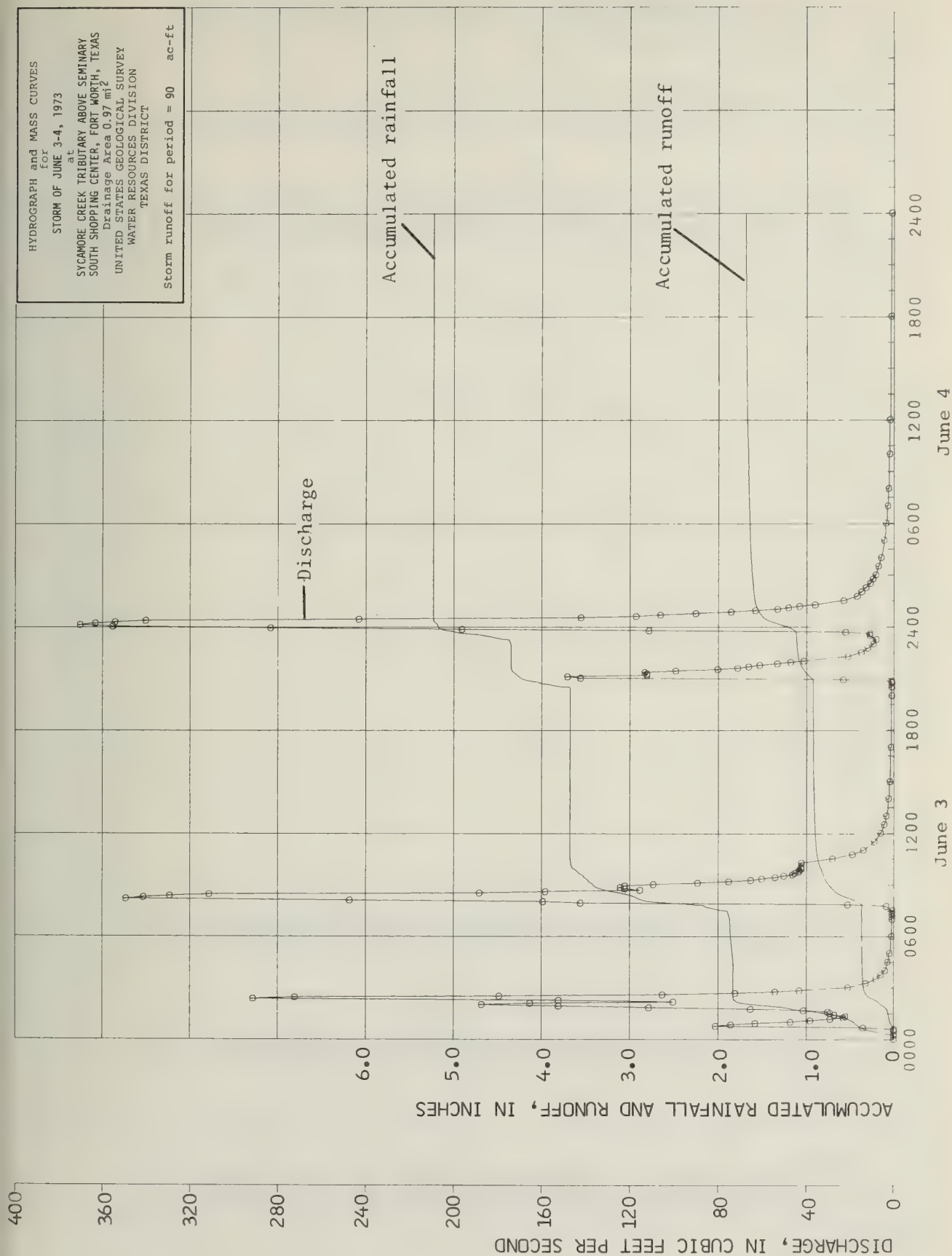
HYDROGRAPH and MASS CURVES

for

STORM OF JUNE 3-4, 1973

SYCAMORE CREEK TRIBUTARY ABOVE SEMINARY
SOUTH SHOPPING CENTER, FORT WORTH, TEXAS
Drainage Area 0.97 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

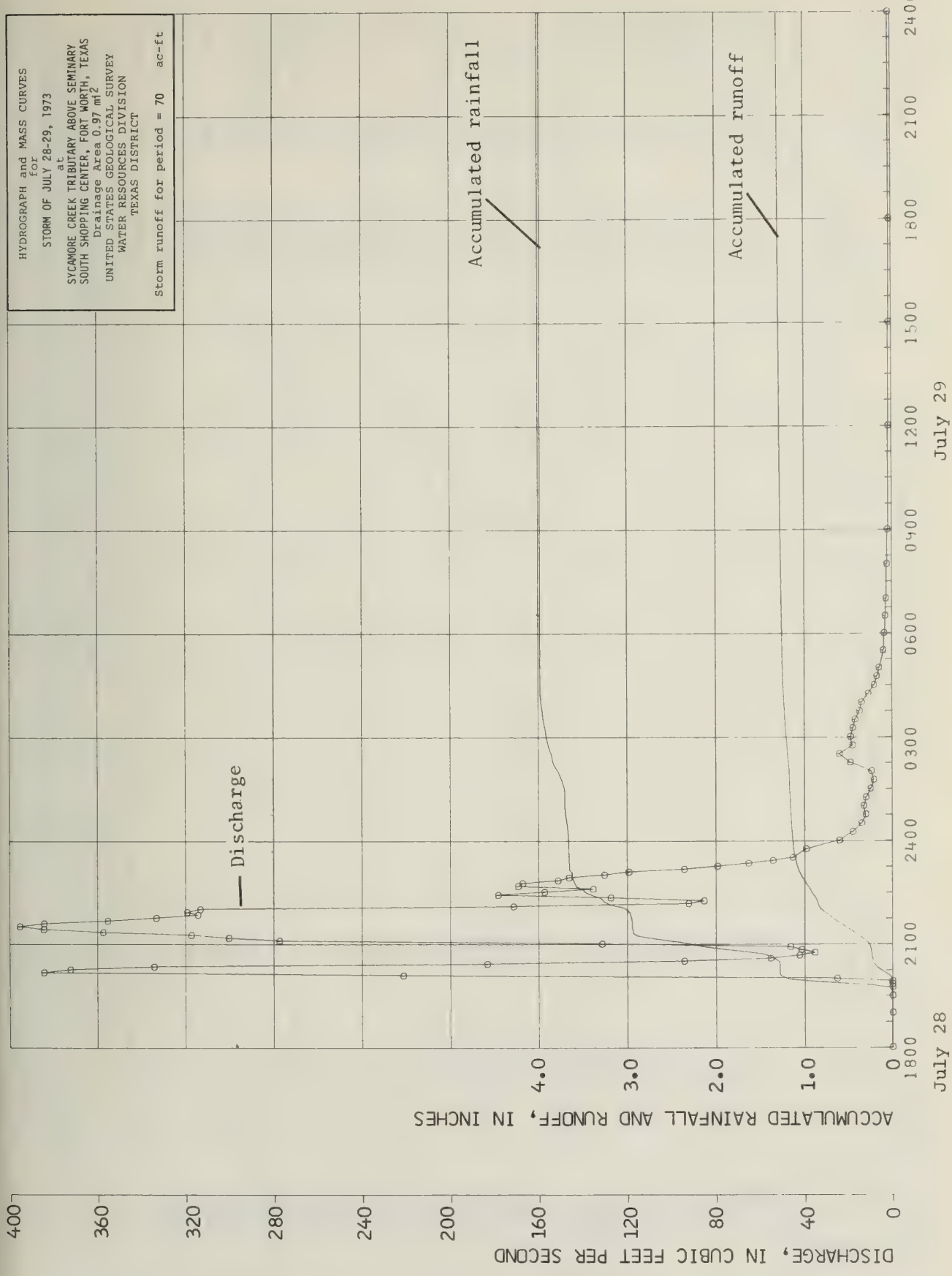
Storm runoff for period = 90 ac-ft



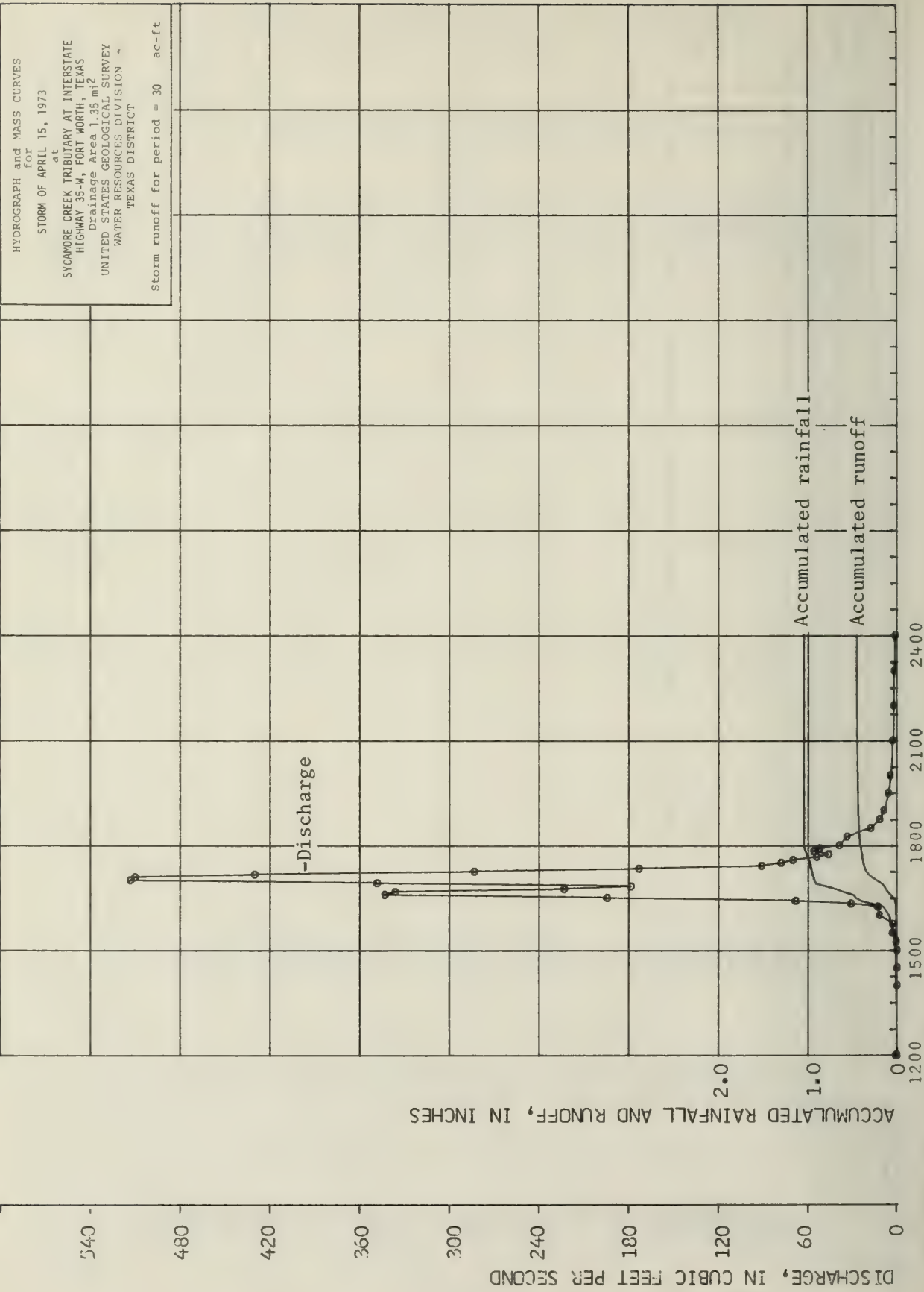
STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
SYCAMORE CK TO IR ABV SEM. S. SHOP. CENTER, FT WORTH, TEX									
JULY 28-29, 1973									
DATE & TIME	G A G E				STORM OF	DISCHARGE		ACCUM.	
	1-ST	2-ST				IN	FT ³ /S	IN	RUNOFF
JULY 28									
0000	0.0	0.0					0.1	0.0008	
1900	0.0	0.0					0.0	0.0014	
1930	0.0	0.0					0.0	0.0014	
1945	0.0	0.05					0.0	0.0014	
1950	0.16	0.61					0.0	0.0014	
1955	0.74	0.98					0.0	0.0014	
2000	1.14	1.29					25.0	0.0048	
2005	1.24	1.33					221.0	0.0342	
2010	1.24	1.42					384.0	0.0853	
2015	1.24	1.42					372.0	0.1348	
2020	1.24	1.42					334.0	0.1793	
2025	1.24	1.42					183.0	0.2036	
2030	1.24	1.43					94.0	0.2162	
2035	1.29	1.46					55.0	0.2235	
2040	1.37	1.47					42.0	0.2291	
2045	1.45	1.61					35.0	0.2337	
2050	1.77	1.79					41.0	0.2392	
2055	2.08	1.95					46.0	0.2453	
2100	2.26	2.12					131.0	0.2628	
2105	2.46	2.35					277.0	0.2996	
2110	2.66	2.73					300.0	0.3396	
2115	2.86	2.95					317.0	0.3818	
2120	2.92	2.98					357.0	0.4293	
2125	2.92	2.98					384.0	0.4804	
2130	2.93	2.99					395.0	0.5330	
2135	2.93	2.99					384.0	0.5841	
2140	2.93	2.99					355.0	0.6314	
2145	2.94	2.99					333.0	0.6757	
2150	2.95	2.99					314.0	0.7175	
2155	2.95	3.03					319.0	0.7600	
2200	2.96	3.11					313.0	0.8016	
2205	2.99	3.28					171.0	0.8244	
2210	3.11	3.53					92.0	0.8367	
2215	3.16	3.61					85.0	0.8480	
2220	3.19	3.64					127.0	0.8649	
2225	3.28	3.72					178.0	0.8886	
2230	3.37	3.79					157.0	0.9095	
2235	3.39	3.85					135.0	0.9274	
2240	3.47	3.90					169.0	0.9499	

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048530									
SYCAMORE CK TPIB ABV SEM. S. SHOP. CENTER, FT WORTH, TEX									
JULY 28-29, 1973									
DATE & TIME	G A G E			N U M B E R			DISCHARGE		
	1-ST	2-ST		1	2	3	IN	FT ³ /S	IN.
JULY 28									
2245	3.49	3.91					3.58	167.0	0.9722
2250	3.50	3.95					3.60	151.0	0.9923
2255	3.51	3.99					3.62	146.0	1.0117
2300	3.51	4.00					3.62	130.0	1.0290
2305	3.51	4.00					3.62	119.0	1.0449
2310	3.55	4.00					3.65	94.0	1.0574
2315	3.55	4.00					3.65	79.0	1.0679
2320	3.55	4.00					3.65	65.0	1.0765
2325	3.55	4.02					3.65	54.0	1.0837
2330	3.55	4.02					3.65	45.0	1.0957
2345	3.55	4.03					3.66	39.0	1.1113
2400	3.55	4.04					3.66	24.0	1.1161
JULY 29									
0000	3.55	4.04					3.66	24.0	1.1209
0015	3.56	4.04					3.67	18.0	1.1281
0030	3.57	4.05					3.68	14.0	1.1337
0045	3.58	4.08					3.69	12.0	1.1384
0100	3.59	4.09					3.70	13.0	1.1436
0115	3.59	4.09					3.70	12.0	1.1484
0130	3.59	4.10					3.70	9.8	1.1523
0145	3.62	4.13					3.73	8.3	1.1557
0200	3.65	4.21					3.77	9.3	1.1594
0215	3.71	4.25					3.83	19.0	1.1670
0230	3.73	4.28					3.85	24.0	1.1765
0245	3.76	4.32					3.88	18.0	1.1837
0300	3.78	4.35					3.91	19.0	1.1913
0315	3.79	4.38					3.92	18.0	1.1985
0330	3.81	4.41					3.94	17.0	1.2053
0345	3.82	4.42					3.95	15.0	1.2113
0400	3.84	4.42					3.97	14.0	1.2169
0415	3.85	4.42					3.98	11.0	1.2213
0430	3.85	4.43					3.98	8.3	1.2246
0445	3.85	4.43					3.98	7.1	1.2274
0500	3.85	4.43					3.98	6.1	1.2311
0530	3.85	4.43					3.98	4.2	1.2344
0600	3.85	4.43					3.98	3.7	1.2374
0630	3.85	4.43					3.98	3.2	1.2399
0700	3.85	4.43					3.98	2.8	1.2433
0800	3.85	4.43					3.98	2.4	1.2471
0900	3.85	4.43					3.98	2.1	1.2538

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0R048530		S. SHOP. CENTER, FT WORTH, TEX		STORM OF JULY 28-29, 1973		ACCUM. WEIGHIED PRECIP. IN.		DISCHARGE IN FT ³ /S	
DATE & TIME		G A G E		N U M B E R		PRECIP. IN.		FT ³ /S	
		1-ST	2-ST						
JULY 29									
1200		3.85	4.43			3.98		1.6	1.2615
1500		3.85	4.43			3.98		1.4	1.2682
1800		3.85	4.43			3.98		1.1	1.2761
2400		3.85	4.43			3.98		1.1	1.2814



STORM RAINFALL AND RUNOFF RECORD										
1973 WATER YEAR										
SYCAMORE CK TRIR AT INTERSTATE HWY 35-W, FT WORTH, TFX. STORM OF APRIL 15, 1973										
DATE & TIME	G A G E		N U M B E R		ACCUM. WEIGHTED PRECIP.		DISCHARGE IN		ACCUM. RUNOFF	
	1-ST	2-ST			IN.	FT ³ /S	IN.		IN.	
APR. 15										
2000	1.02	1.09			1.05	4.9			0.4405	
2100	1.02	1.09			1.05	3.2			0.4442	
2200	1.02	1.09			1.05	2.4			0.4470	
2300	1.02	1.09			1.05	2.1			0.4494	
2400	1.02	1.09			1.05	1.5			0.4502	



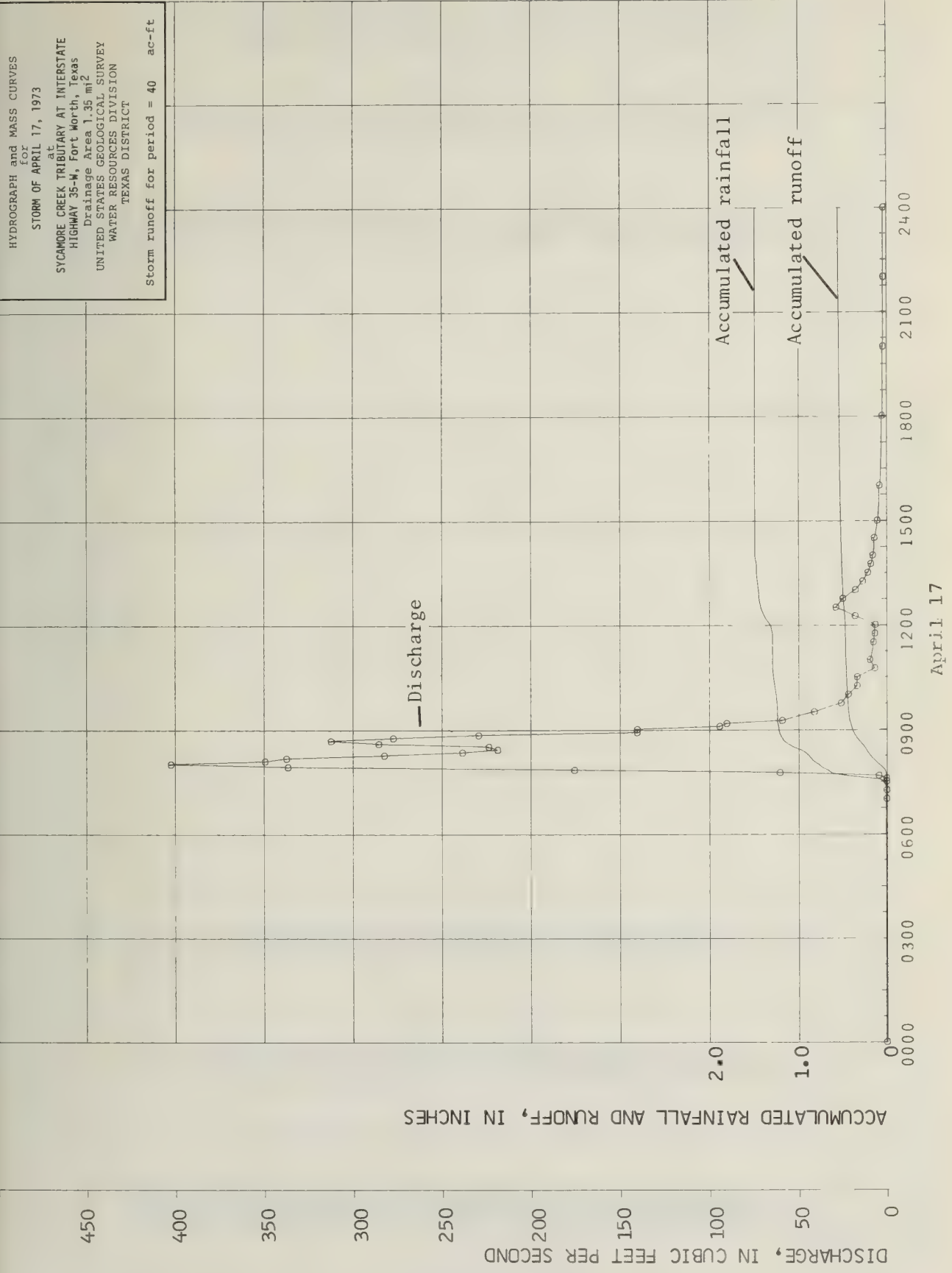
April 15, 1973

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048540									
SYCAMORE CK TRIB AT INTERSTATE HWY 35-W, FT WORTH, TEX. STORM OF APRIL 17, 1973									
DATE & TIME	1-ST	2-ST	G A G F N U M B E R				IN.	FT ³ /S	IN.
APR. 17									
0000	0.0	0.0					0.0	0.3	0.0013
0700	0.0	0.0					0.0	0.3	0.0026
0715	0.0	0.0					0.0	0.3	0.0027
0730	0.07	0.0					0.04	0.3	0.0028
0735	0.15	0.02					0.09	0.3	0.0028
0740	0.57	0.16					0.39	4.7	0.0033
0745	0.88	0.29					0.62	60.0	0.0090
0750	0.91	0.35					0.66	175.0	0.0257
0755	0.98	0.41					0.73	336.0	0.0579
0800	1.02	0.45					0.77	402.0	0.0963
0805	1.08	0.49					0.82	349.0	0.1297
0810	1.11	0.52					0.85	337.0	0.1619
0815	1.13	0.56					0.88	282.0	0.1889
0820	1.16	0.60					0.91	238.0	0.2117
0825	1.19	0.68					0.97	218.0	0.2325
0830	1.23	0.82					1.05	223.0	0.2539
0835	1.25	0.92					1.10	285.0	0.2811
0840	1.27	1.01					1.16	312.0	0.3110
0845	1.29	1.03					1.18	277.0	0.3375
0850	1.31	1.05					1.20	229.0	0.3594
0855	1.32	1.07					1.21	140.0	0.3728
0900	1.33	1.08					1.22	94.0	0.3951
0905	1.33	1.08					1.23	90.0	0.4038
0910	1.34	1.09					1.23	59.0	0.4150
0915	1.34	1.10					1.23	41.0	0.4268
0930	1.34	1.10					1.24	26.0	0.4343
0945	1.35	1.10					1.25	22.0	0.4406
1000	1.36	1.11					1.27	17.0	0.4455
1015	1.38	1.12					1.28	17.0	0.4503
1030	1.39	1.14					1.29	7.0	0.4523
1045	1.40	1.15					1.29	9.8	0.4566
1100	1.40	1.15					1.29	7.8	0.4599
1130	1.40	1.15					1.29	7.0	0.4619
1145	1.40	1.15					1.31	6.8	0.4639
1200	1.42	1.17					1.38	18.0	0.4690
1215	1.50	1.22					1.42	29.0	0.4774
1230	1.55	1.25					1.44	25.0	0.4845
1245	1.58	1.26					1.44	18.0	0.4897
1300	1.59	1.26							

STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 0R04R540									
SYCAMORE CK TRIP AT INTERSTATE HWY 35-W, FT WORTH, TEX. STORM OF APRIL 17, 1973									
DATE & TIME	1-ST	2-ST	G A G E			N U M B E R	ACCUM. UNWEIGHTED PRECIP. IN.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.
APR. 17									
1315	1.60	1.28					1.46	14.0	0.4937
1330	1.61	1.29					1.47	11.0	0.4969
1345	1.61	1.29					1.47	9.3	0.4995
1400	1.63	1.30					1.48	8.2	0.5031
1430	1.63	1.30					1.48	7.4	0.5073
1500	1.63	1.30					1.48	5.6	0.5121
1600	1.63	1.30					1.48	4.4	0.5197
1800	1.63	1.30					1.48	3.0	0.5266
2000	1.63	1.30					1.48	2.4	0.5321
2200	1.63	1.30					1.48	2.1	0.5369
2400	1.63	1.30					1.48	2.0	0.5392

HYDROGRAPH and MASS CURVES
 for
 STORM OF APRIL 17, 1973
 at
 SYCAMORE CREEK TRIBUTARY AT INTERSTATE
 HIGHWAY 35-W, Fort Worth, Texas
 Drainage Area 1.35 mi²
 UNITED STATES GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 TEXAS DISTRICT

Storm runoff for period = 40 ac-ft

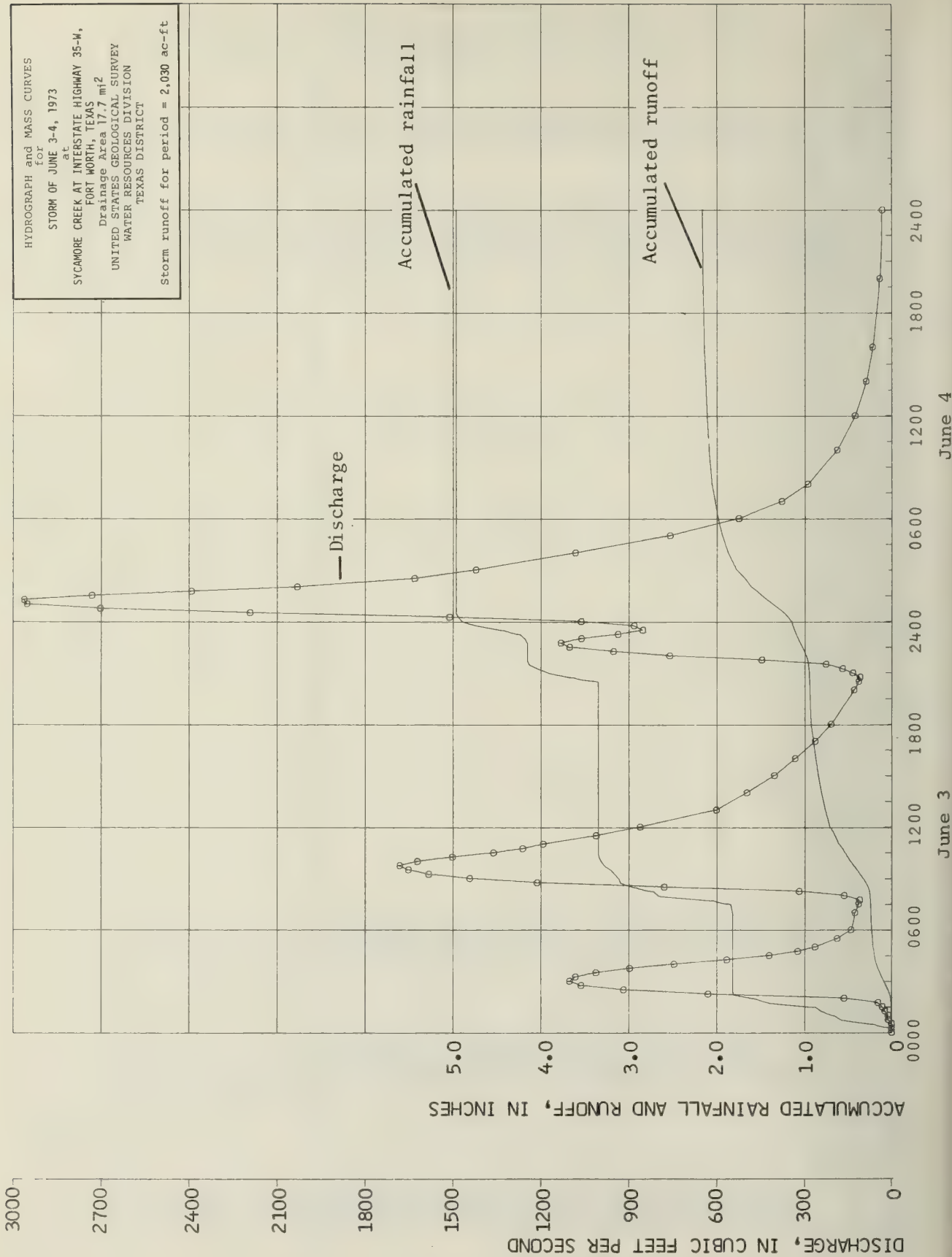


STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STATION NO. 08048540									
SYCAMORE CK TPIB AT INTERSTATE HWY 35-W. FT WORTH, TEX. STORM OF JUNE 3-4, 1973									
DATE & TIME	1-ST	2-ST	G A G F N U M B E R				PRECIP. IN.	FT ³ /S	IN.
JUNE 3									
0000	0.0	0.0					0.0	0.1	0.0000
0015	0.0	0.0					0.0	0.1	0.0000
0030	0.32	0.04					0.20	0.1	0.0001
0035	0.37	0.14					0.27	0.2	0.0001
0040	0.40	0.26					0.34	37.0	0.0036
0045	0.42	0.30					0.37	173.0	0.0202
0050	0.44	0.33					0.39	244.0	0.0435
0055	0.46	0.38					0.42	215.0	0.0641
0100	0.47	0.39					0.43	148.0	0.0782
0105	0.50	0.41					0.46	84.0	0.0863
0110	0.53	0.44					0.49	61.0	0.0921
0115	0.56	0.47					0.52	48.0	0.0967
0120	0.60	0.49					0.55	37.0	0.1002
0125	0.69	0.51					0.61	53.0	0.1053
0130	0.79	0.52					0.67	39.0	0.1090
0135	0.91	0.58					0.76	44.0	0.1132
0140	1.01	0.69					0.87	51.0	0.1181
0145	1.17	0.89					1.05	90.0	0.1267
0150	1.22	1.12					1.18	248.0	0.1504
0155	1.26	1.36					1.30	429.0	0.1915
0200	1.47	1.44					1.46	492.0	0.2385
0205	1.69	1.45					1.58	505.0	0.2868
0210	1.76	1.75					1.76	438.0	0.3287
0215	1.78	1.86					1.82	358.0	0.3630
0220	1.79	1.91					1.84	417.0	0.4029
0225	1.79	1.95					1.86	495.0	0.4502
0230	1.79	1.96					1.86	522.0	0.5002
0235	1.79	1.96					1.86	427.0	0.5410
0240	1.79	1.96					1.86	257.0	0.5656
0245	1.79	1.96					1.86	109.0	0.5760
0250	1.79	1.96					1.86	81.0	0.5876
0300	1.79	1.96					1.86	47.0	0.5989
0315	1.79	1.96					1.86	19.0	0.6043
0330	1.79	1.96					1.86	12.0	0.6078
0345	1.79	1.96					1.86	8.5	0.6102
0400	1.79	1.96					1.86	6.6	0.6130
0430	1.79	1.96					1.86	4.5	0.6156
0500	1.80	1.97					1.87	3.4	0.6186
0600	1.82	1.99					1.89	2.0	0.6208

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 0804A540									
SYCAMORE CK TPIR AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
STORM OF JUNE 3-4, 1973									
DATE & TIME	G A G F				N U M B E R		ACCUM.		
	1-ST	2-ST					WEIGHTED	DISCHARGE	IN. RUNOFF
	1-ST	2-ST					PRECIP.	IN	FT ³ /S
							IN.		IN.
JUNE 3									
0700	1.83	2.00					1.90	1.5	0.6219
0715	1.84	2.00					1.91	1.4	0.6223
0730	1.86	2.01					1.93	1.4	0.6227
0745	2.17	2.02					2.10	6.8	0.6240
0750	2.19	2.03					2.12	9.6	0.6249
0755	2.31	2.37					2.34	169.0	0.6411
0800	2.62	2.64					2.63	345.0	0.6741
0805	2.79	2.86					2.82	453.0	0.7174
0810	2.81	3.09					2.93	546.0	0.7697
0815	2.84	3.15					2.98	704.0	0.8370
0820	2.88	3.16					3.00	756.0	0.9093
0825	2.93	3.19					3.04	613.0	0.9680
0830	3.01	3.21					3.10	562.0	1.0217
0835	3.10	3.23					3.16	426.0	1.0625
0840	3.21	3.29					3.25	269.0	1.0882
0845	3.29	3.34					3.31	218.0	1.1090
0850	3.34	3.37					3.35	220.0	1.1301
0855	3.39	3.38					3.39	211.0	1.1503
0900	3.40	3.44					3.42	211.0	1.1705
0905	3.41	3.45					3.43	191.0	1.1887
0910	3.45	3.46					3.45	132.0	1.2013
0915	3.46	3.48					3.47	124.0	1.2132
0920	3.47	3.49					3.48	109.0	1.2236
0925	3.50	3.50					3.50	109.0	1.2341
0930	3.52	3.52					3.52	102.0	1.2438
0935	3.53	3.53					3.53	87.0	1.2521
0940	3.57	3.55					3.56	80.0	1.2598
0945	3.58	3.58					3.58	63.0	1.2658
0950	3.60	3.59					3.60	68.0	1.2723
0955	3.62	3.62					3.62	55.0	1.2776
1000	3.65	3.64					3.65	63.0	1.2896
1015	3.66	3.69					3.67	67.0	1.3089
1030	3.66	3.72					3.69	36.0	1.3192
1045	3.66	3.73					3.69	26.0	1.3266
1100	3.66	3.73					3.69	16.0	1.3335
1130	3.66	3.73					3.69	9.3	1.3389
1200	3.66	3.73					3.69	7.0	1.3429
1230	3.66	3.73					3.69	5.4	1.3460
1300	3.66	3.73					3.69	4.2	1.3496

STORM RAINFALL AND RUNOFF RECORD									
SYCAMORE CK TPJB AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
STORM OF JUNF 3-4, 1973									
G A G E N U M B E R									
1-ST 2-ST									
PRECIP. IN. FT ³ /S IN.									
ACCUM. DISCHARGE IN ACCUM. RUNOFF									
1973 WATER YEAR									
DATE & TIME									
JUNE 3									
1400	3.66	3.73				3.69	3.0	1.3530	
1500	3.66	3.73				3.69	2.3	1.3570	
1700	3.66	3.73				3.69	1.4	1.3610	
2000	3.66	3.73				3.69	1.1	1.3632	
2030	3.66	3.73				3.69	0.9	1.3636	
2045	4.08	3.73				3.93	0.9	1.3638	
2050	4.12	3.79				3.97	0.9	1.3639	
2055	4.19	4.04				4.12	12.0	1.3650	
2100	4.24	4.14				4.20	204.0	1.3845	
2105	4.26	4.17				4.22	327.0	1.4158	
2110	4.27	4.24				4.26	291.0	1.4436	
2115	4.28	4.30				4.29	193.0	1.4621	
2120	4.30	4.31				4.30	235.0	1.4846	
2125	4.32	4.33				4.32	207.0	1.5044	
2130	4.33	4.35				4.34	148.0	1.5185	
2135	4.34	4.36				4.35	118.0	1.5298	
2140	4.34	4.36				4.35	115.0	1.5408	
2145	4.34	4.37				4.35	104.0	1.5508	
2150	4.34	4.37				4.35	90.0	1.5594	
2155	4.34	4.37				4.35	75.0	1.5666	
2200	4.34	4.37				4.35	63.0	1.5786	
2215	4.34	4.37				4.35	33.0	1.5881	
2230	4.34	4.37				4.35	21.0	1.5941	
2245	4.34	4.37				4.35	14.0	1.5981	
2300	4.34	4.37				4.35	10.0	1.6010	
2315	4.36	4.39				4.37	9.1	1.6036	
2330	4.69	4.43				4.58	19.0	1.6072	
2335	4.79	4.50				4.66	19.0	1.6091	
2340	5.02	4.66				4.86	27.0	1.6116	
2345	5.07	4.77				4.94	115.0	1.6226	
2350	5.14	4.97				5.07	265.0	1.6480	
2355	5.14	5.19				5.16	283.0	1.6751	
2400	5.15	5.27				5.20	466.0	1.6973	
JUNE 4									
0000	5.15	5.27				5.20	466.0	1.7196	
0005	5.15	5.29				5.21	586.0	1.7757	
0010	5.15	5.31				5.22	723.0	1.8448	
0015	5.17	5.31				5.23	743.0	1.9159	
0020	5.20	5.31				5.25	558.0	1.9693	
0025	5.20	5.31				5.25	438.0	2.0112	

STORM PAINFALL AND RUNOFF RECORD									
STA. NO. 08048540									
SYCAMORE CK TP1B AT INTERSTATE HWY 35-W, FT WORTH, TEX. STORM OF JUNE 3-4, 1973									
DATE & TIME	G A G E			N U M B E R			1973 WATER YEAR		
	1-ST	2-ST					DISCHARGE	ACCUM.	PRECIP.
							IN	IN.	IN.
JUNE 4									
0030	5.20	5.33					294.0	2.0393	
0035	5.20	5.34					227.0	2.0610	
0040	5.20	5.34					167.0	2.0770	
0045	5.20	5.34					111.0	2.0876	
0050	5.20	5.34					94.0	2.0966	
0055	5.20	5.34					82.0	2.1044	
0100	5.20	5.34					73.0	2.1114	
0105	5.20	5.34					60.0	2.1172	
0110	5.20	5.34					53.0	2.1222	
0115	5.20	5.34					42.0	2.1303	
0130	5.20	5.34					29.0	2.1386	
0145	5.20	5.34					21.0	2.1446	
0200	5.20	5.34					16.0	2.1492	
0215	5.20	5.34					12.0	2.1526	
0230	5.20	5.34					11.0	2.1558	
0245	5.20	5.34					8.9	2.1584	
0300	5.20	5.34					8.2	2.1619	
0330	5.20	5.34					7.2	2.1660	
0400	5.20	5.34					6.0	2.1712	
0500	5.20	5.34					4.7	2.1766	
0600	5.20	5.34					3.8	2.1809	
0700	5.20	5.34					3.2	2.1846	
0800	5.20	5.34					2.9	2.1896	
1000	5.20	5.34					2.4	2.1951	
1200	5.20	5.34					2.0	2.2043	
1800	5.20	5.34					1.2	2.2126	
2400	5.20	5.34					0.8	2.2151	



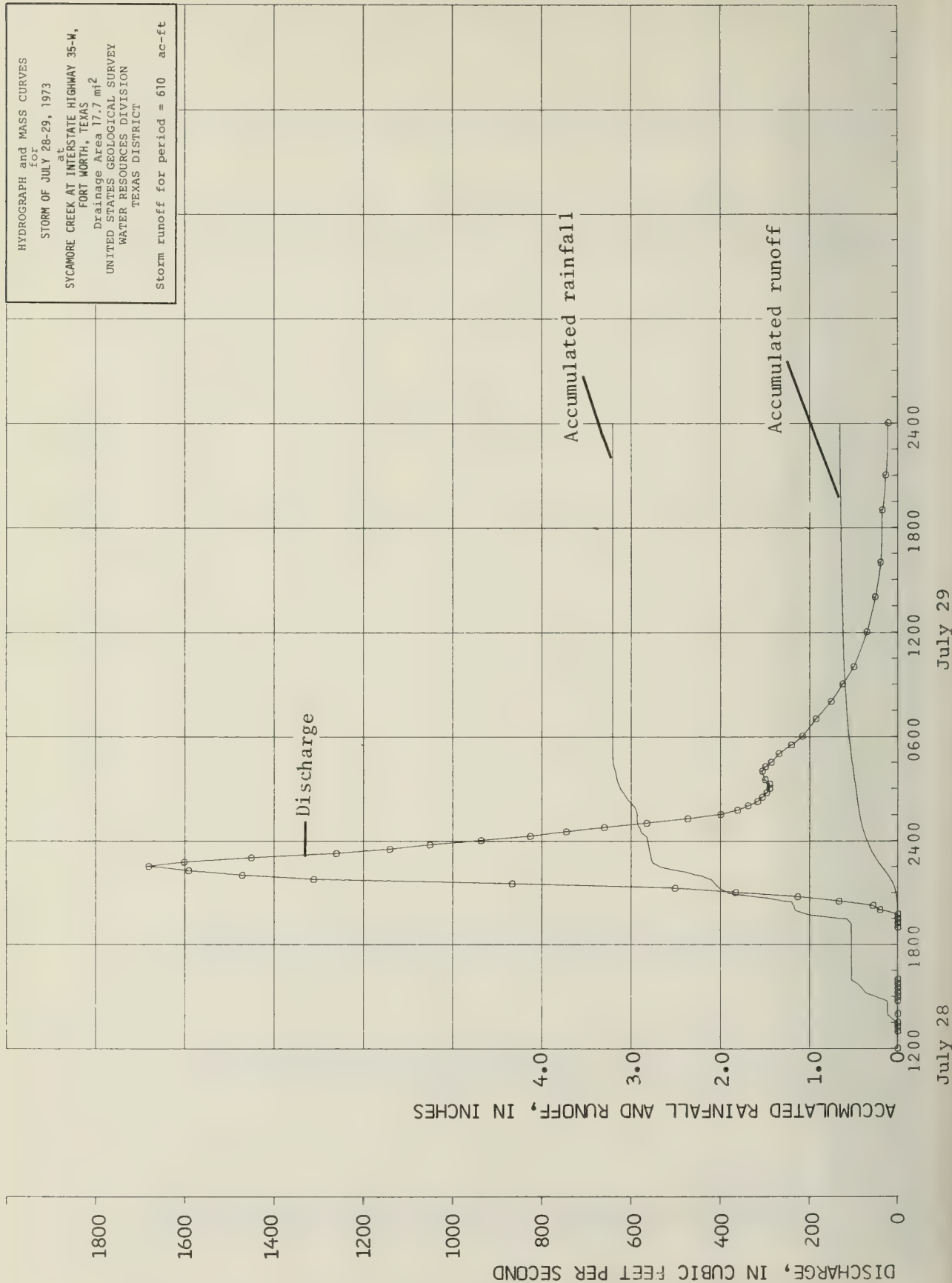
STATION NO. 08048540									
SYCAMORE CK TRIBUTARY AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
DATE & TIME	G A G E				PRECIP. IN.	DISCHARGE			
	1-ST	2-ST	N U M B E R			IN.	FT ³ /S	IN.	ACCUM. RUNOFF
JULY 28									
0000	0.0	0.0				0.0		0.1	0.0007
0100	0.0	0.0				0.0		0.1	0.0020
0200	0.0	0.0				0.0		0.1	0.0020
0300	0.0	0.05				0.02		0.1	0.0021
0400	0.16	0.61				0.36		0.1	0.0021
0500	0.74	0.98				0.85		8.9	0.0029
0600	1.14	1.29				1.21		274.0	0.0291
0700	1.24	1.33				1.28		460.0	0.0731
0800	1.24	1.42				1.32		652.0	0.1355
0900	1.24	1.42				1.32		745.0	0.2068
1000	1.24	1.42				1.32		660.0	0.2699
1100	1.24	1.42				1.32		487.0	0.3165
1200	1.24	1.43				1.32		274.0	0.3427
1300	1.29	1.46				1.36		142.0	0.3563
1400	1.37	1.47				1.41		72.0	0.3632
1500	1.45	1.61				1.52		51.0	0.3680
1600	1.77	1.79				1.78		52.0	0.3730
1700	2.08	1.95				2.02		48.0	0.3776
1800	2.26	2.12				2.20		223.0	0.3989
1900	2.46	2.35				2.41		399.0	0.4371
2000	2.66	2.73				2.69		531.0	0.4879
2100	2.86	2.95				2.90		597.0	0.5450
2200	2.92	2.98				2.95		745.0	0.6163
2300	2.92	2.98				2.95		794.0	0.6922
2400	2.93	2.99				2.96		873.0	0.7757
2500	2.93	2.99				2.96		882.0	0.8601
2600	2.93	2.99				2.96		811.0	0.9377
2700	2.94	2.99				2.96		725.0	1.0070
2800	2.95	2.99				2.97		604.0	1.0648
2900	2.95	3.03				2.99		540.0	1.1164
3000	2.96	3.11				3.03		472.0	1.1616
3100	2.99	3.28				3.12		334.0	1.1935
3200	3.11	3.53				3.29		245.0	1.2170
3300	3.16	3.61				3.36		334.0	1.2489
3400	3.19	3.64				3.39		445.0	1.2915
3500	3.28	3.72				3.47		499.0	1.3392
3600	3.37	3.79				3.55		420.0	1.3794
3700	3.39	3.85				3.59		343.0	1.4122
3800	3.47	3.90				3.66		312.0	1.4420

STA. NO. 08048540		STORM RAINFALL AND RUNOFF RECORD										1973 WATER YEAR				
SYCAMORE CK TRIB AT INTERSTATE HWY 35-W. FT WORTH. TEX.		STORM OF JULY 28-29, 1973														
DATE & TIME	1-ST		2-ST		G A G E		N U M B E R		P R E C I P.		A C C U M.		D I S C H A R G E		A C C U M.	
													IN.	FT ³ /S	IN.	RUNOFF
JULY 28																
2245	3.49		3.91								3.67		295.0		1.4703	
2250	3.50		3.95								3.70		291.0		1.4981	
2255	3.51		3.99								3.72		264.0		1.5233	
2300	3.51		4.00								3.73		238.0		1.5461	
2305	3.51		4.00								3.73		218.0		1.5670	
2310	3.55		4.00								3.75		194.0		1.5855	
2315	3.55		4.00								3.75		171.0		1.6019	
2320	3.55		4.00								3.75		126.0		1.6139	
2325	3.55		4.02								3.76		108.0		1.6243	
2330	3.55		4.02								3.76		88.0		1.6411	
2345	3.55		4.03								3.76		66.0		1.6600	
2400	3.55		4.04								3.77		37.0		1.6653	
JULY 29																
0000	3.55		4.04								3.77		37.0		1.6706	
0015	3.56		4.04								3.77		25.0		1.6778	
0030	3.57		4.05								3.78		18.0		1.6830	
0045	3.58		4.08								3.80		13.0		1.6867	
0100	3.59		4.09								3.81		18.0		1.6919	
0115	3.59		4.09								3.81		15.0		1.6962	
0130	3.59		4.10								3.81		11.0		1.6993	
0145	3.62		4.13								3.84		10.0		1.7022	
0200	3.65		4.21								3.90		16.0		1.7068	
0215	3.71		4.25								3.95		41.0		1.7186	
0230	3.73		4.28								3.97		37.0		1.7292	
0245	3.76		4.32								4.01		27.0		1.7369	
0300	3.78		4.35								4.03		27.0		1.7447	
0315	3.79		4.38								4.05		27.0		1.7524	
0330	3.81		4.41								4.07		23.0		1.7590	
0345	3.82		4.42								4.08		21.0		1.7650	
0400	3.84		4.42								4.10		17.0		1.7699	
0415	3.85		4.42								4.10		12.0		1.7734	
0430	3.85		4.43								4.11		9.3		1.7760	
0445	3.85		4.43								4.11		8.0		1.7783	
0500	3.85		4.43								4.11		6.8		1.7813	
0530	3.85		4.43								4.11		5.4		1.7844	
0600	3.85		4.43								4.11		4.2		1.7868	
0630	3.85		4.43								4.11		3.8		1.7889	
0700	3.85		4.43								4.11		3.7		1.7921	
0800	3.85		4.43								4.11		3.0		1.7956	
0900	3.85		4.43								4.11		2.7		1.8018	

STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 08048540									
SYCAMORE CK TPIB AT INTERSTATE HWY 35-W, FT WORTH, TEX.									
STORM OF JULY 28-29, 1973									
DATE & TIME	GAGE			NUMBER			ACCUM. WEIGHTED PRECIP.		
	1-ST	2-ST					IN.	FT ³ /S	IN.
JULY 29									
1200	3.85	4.43					4.11	1.8	1.8080
1500	3.85	4.43					4.11	1.5	1.8131
1800	3.85	4.43					4.11	1.3	1.8196
2400	3.85	4.43					4.11	1.1	1.8235

HYDROGRAPH and MASS CURVES
 at
 STORM OF JULY 28-29, 1973
 SYCAMORE CREEK AT INTERSTATE HIGHWAY 35-W,
 FORT WORTH, TEXAS
 Drainage Area 17.7 mi²
 UNITED STATES GEOLOGICAL SURVEY
 WATER RESOURCES DIVISION
 TEXAS DISTRICT

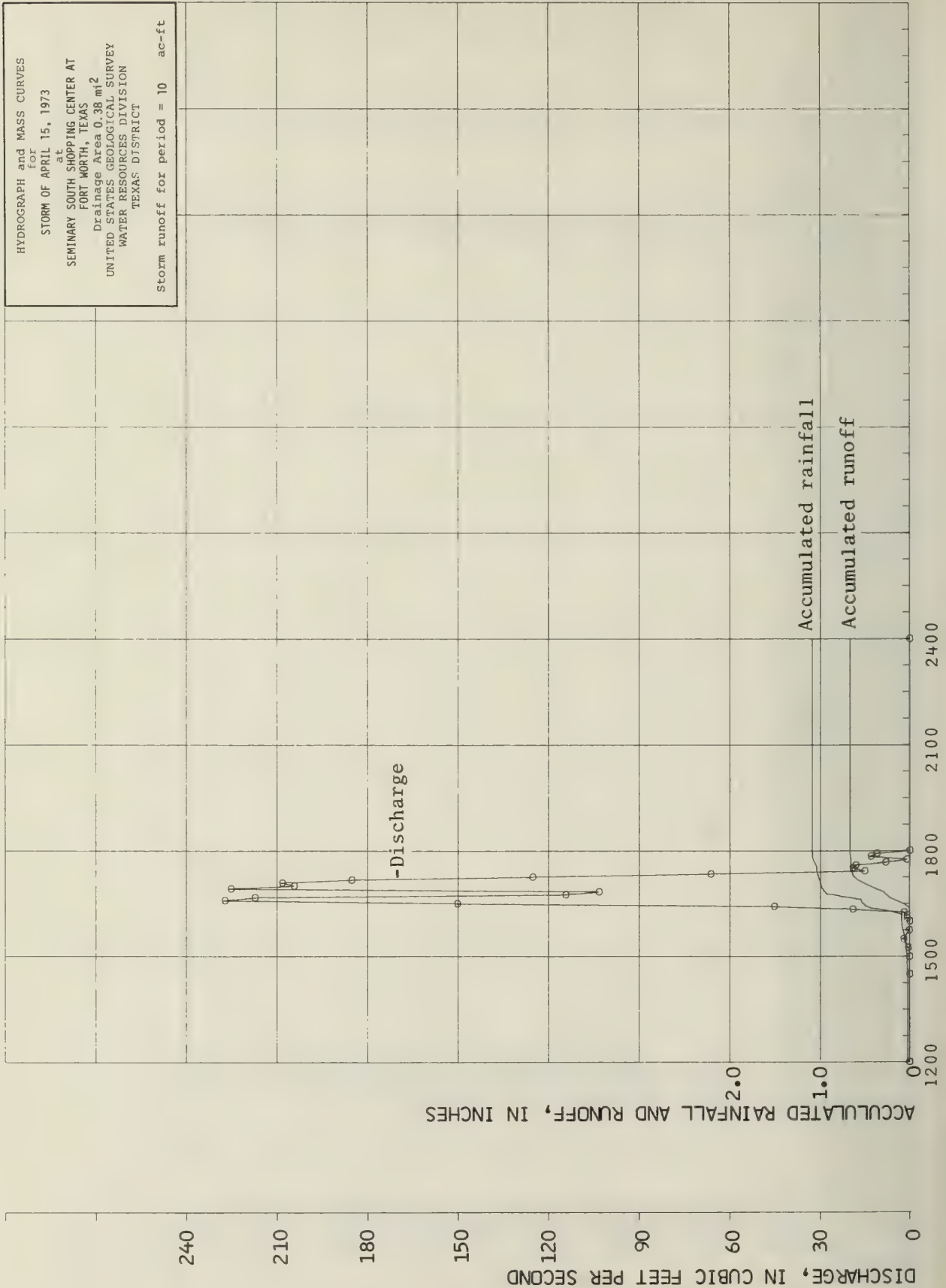
Storm runoff for period = 610 ac-ft



STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO.	EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF APRIL 15, 1973								
DATE & TIME	2-ST	G A G E	N U M B E R	WEIGHTED PRECIP. IN.	ACCUM. DISCHARGE IN	FT ³ /S	IN.	DISCHARGE IN	ACCUM. RUNOFF
APR. 15									
0000	0.0			0.0		0.0	0.0	0.0	0.0
1145	0.0			0.0		0.0	0.0	0.0	0.0
1200	0.02			0.02		0.0	0.0	0.0	0.0
1430	0.02			0.02		0.0	0.0	0.0	0.0
1500	0.03			0.03		0.0	0.0	0.0	0.0
1515	0.04			0.04		0.5	0.0002		
1530	0.05			0.05		2.1	0.0009		
1545	0.08			0.08		0.2	0.0010		
1600	0.09			0.09		0.0	0.0010		
1605	0.09			0.09		1.0	0.0013		
1610	0.09			0.09		1.0	0.0016		
1615	0.20			0.20		2.0	0.0023		
1620	0.42			0.42		19.0	0.0088		
1625	0.49			0.49		45.0	0.0241		
1630	0.53			0.53		150.0	0.0750		
1635	0.54			0.54		227.0	0.1522		
1640	0.74			0.74		217.0	0.2259		
1645	0.92			0.92		114.0	0.2647		
1650	0.95			0.95		103.0	0.2997		
1655	0.97			0.97		225.0	0.3761		
1700	0.98			0.98		204.0	0.4454		
1705	0.99			0.99		208.0	0.5161		
1710	1.00			1.00		185.0	0.5790		
1715	1.01			1.01		125.0	0.6215		
1720	1.02			1.02		66.0	0.6439		
1725	1.03			1.03		15.0	0.6490		
1730	1.03			1.03		19.0	0.6555		
1735	1.04			1.04		18.0	0.6616		
1740	1.06			1.06		8.0	0.6643		
1745	1.07			1.07		1.0	0.6646		
1750	1.08			1.08		13.0	0.6691		
1755	1.08			1.08		11.0	0.6728		
1800	1.09			1.09		0.0	0.6728		
2400	1.09			1.09		0.0	0.6728		

HYDROGRAPH and MASS CURVES
for
STORM OF APRIL 15, 1973
at
SEMINARY SOUTH SHOPPING CENTER AT
FORT WORTH, TEXAS
Drainage Area 0.38 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 10 ac-ft



STA. NO.	STORM RAINFALL AND RUNOFF RECORD										1973 WATER YEAR	
	EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF JUNE 3-4, 1973										DISCHARGE	ACCUM.
DATE & TIME	P-ST	G A G E N U M B E R								WEIGHTED PRECIP.	IN	IN.
										FT ³ /S		
JUNE 3												
0000	0.0									0.0	0.0	0.0
0015	0.0									0.0	0.0	0.0001
0030	0.04									0.0	0.0	0.0001
0035	0.14									0.0	0.0	0.0001
0040	0.26									0.2	0.2	0.0002
0045	0.30									37.0	37.0	0.0127
0050	0.33									159.0	159.0	0.0668
0055	0.38									163.0	163.0	0.1222
0100	0.39									141.0	141.0	0.1701
0105	0.41									85.0	85.0	0.1990
0110	0.44									37.0	37.0	0.2115
0115	0.47									23.0	23.0	0.2194
0120	0.49									19.0	19.0	0.2258
0125	0.51									14.0	14.0	0.2306
0130	0.52									31.0	31.0	0.2411
0135	0.58									12.0	12.0	0.2452
0140	0.69									15.0	15.0	0.2503
0145	0.89									49.0	49.0	0.2669
0150	1.12									183.0	183.0	0.3291
0155	1.36									318.0	318.0	0.4372
0200	1.44									340.0	340.0	0.5527
0205	1.45									318.0	318.0	0.6608
0210	1.75									273.0	273.0	0.7536
0215	1.86									258.0	258.0	0.8412
0220	1.91									265.0	265.0	0.9313
0225	1.95									204.0	204.0	1.0006
0230	1.96									250.0	250.0	1.0856
0235	1.96									248.0	248.0	1.1698
0240	1.96									152.0	152.0	1.2215
0245	1.96									37.0	37.0	1.2341
0250	1.96									27.0	27.0	1.2432
0255	1.96									17.0	17.0	1.2490
0300	1.96									17.0	17.0	1.2606
0315	1.96									5.0	5.0	1.2657
0330	1.96									2.7	2.7	1.2684
0345	1.96									2.0	2.0	1.2704
0400	1.96									1.7	1.7	1.2730
0430	1.96									1.4	1.4	1.2759
0500	1.97									1.1	1.1	1.2793

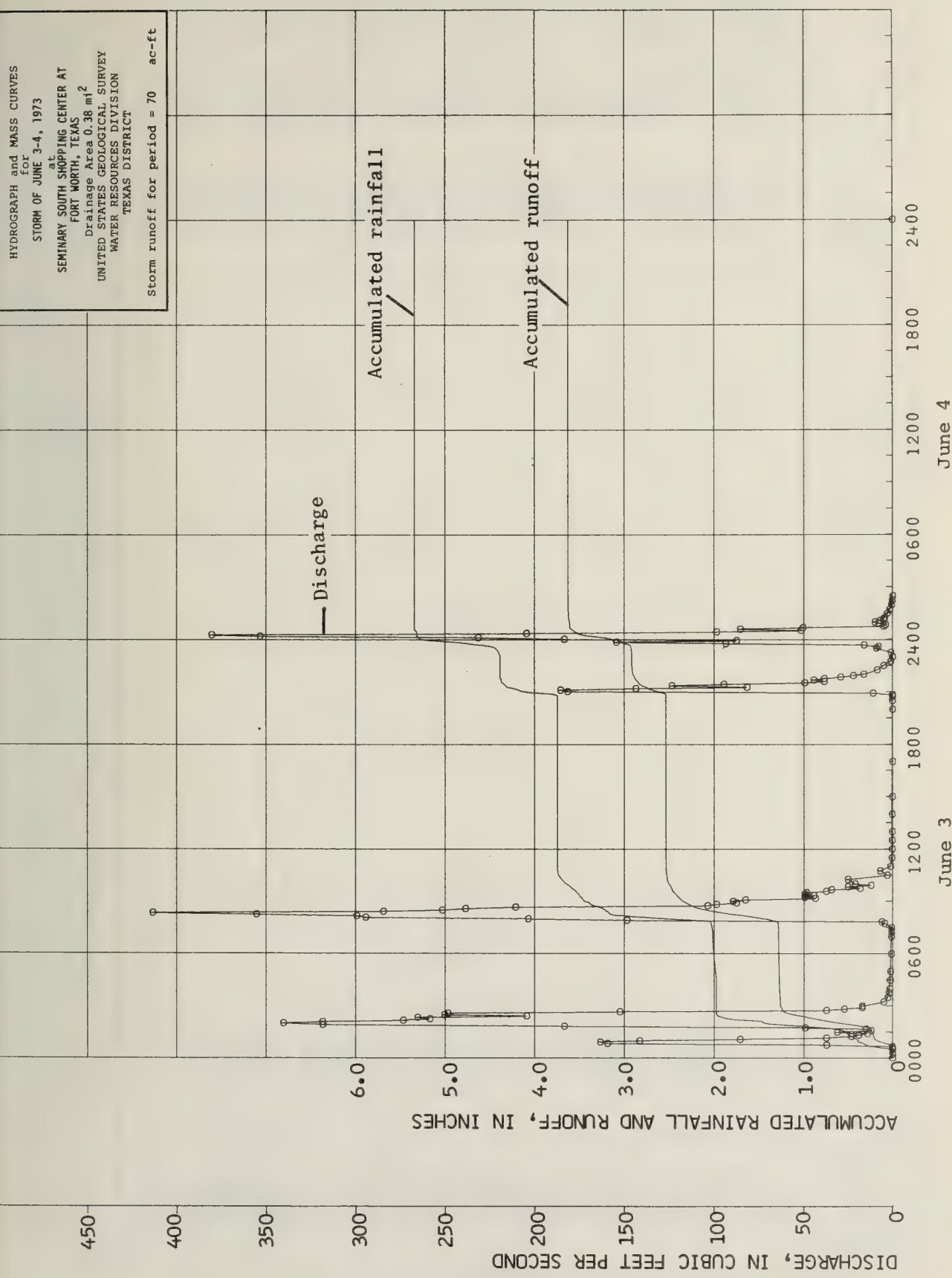
STORM RAINFALL AND RUNOFF RECORD									
STATION NO.									
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF JUNE 3-4, 1973									
DATE & TIME	INST	GAUGE	NUMBER	PRECIP. IN.	WEIGHTED PRECIP. IN.	DISCHARGE IN	1973 WATER YEAR	ACCUM. RUNOFF	IN.
JUNE 3									
0600	1.99			1.99	0.8	1.2823			
0700	2.00			2.00	0.6	1.2839			
0715	2.00			2.00	0.6	1.2845			
0730	2.01			2.01	0.6	1.2851			
0745	2.02			2.02	4.6	1.2882			
0750	2.03			2.03	6.1	1.2903			
0755	2.37			2.37	148.0	1.3406			
0800	2.64			2.64	203.0	1.4096			
0805	2.86			2.86	294.0	1.5095			
0810	3.09			3.09	299.0	1.6111			
0815	3.15			3.15	355.0	1.7317			
0820	3.16			3.16	413.0	1.8721			
0825	3.19			3.19	284.0	1.9686			
0830	3.21			3.21	251.0	2.0539			
0835	3.23			3.23	238.0	2.1348			
0840	3.29			3.29	210.0	2.2061			
0845	3.34			3.34	103.0	2.2411			
0850	3.37			3.37	98.0	2.2744			
0855	3.38			3.38	87.0	2.3040			
0900	3.44			3.44	89.0	2.3342			
0905	3.45			3.45	82.0	2.3621			
0910	3.46			3.46	43.0	2.3767			
0915	3.48			3.48	49.0	2.3934			
0920	3.49			3.49	44.0	2.4083			
0925	3.50			3.50	49.0	2.4250			
0930	3.52			3.52	43.0	2.4413			
0935	3.53			3.53	37.0	2.4539			
0940	3.55			3.55	34.0	2.4654			
0945	3.58			3.58	18.0	2.4715			
0950	3.59			3.59	25.0	2.4800			
0955	3.61			3.61	12.0	2.4841			
1000	3.64			3.64	21.0	2.4984			
1015	3.69			3.69	25.0	2.5239			
1030	3.72			3.72	3.0	2.5269			
1045	3.73			3.73	7.0	2.5340			
1100	3.73			3.73	1.0	2.5356			
1130	3.73			3.73	0.3	2.5362			
1200	3.73			3.73	0.2	2.5366			
1230	3.73			3.73	0.2	2.5370			

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
SIA. NO.	EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF JUNE 3-4, 1973								
DATE & TIME	2-ST	AGE	NUMBER	PRECIP. IN.	FT ³ /S	DISCHARGE IN	ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE ACCUM. RUNOFF	
JUNE 3									
1300	3.73			3.73	0.2		3.73	2.5376	
1400	3.73			3.73	0.2		3.73	2.5384	
1500	3.73			3.73	0.1		3.73	2.5393	
1700	3.73			3.73	0.0		3.73	2.5393	
2000	3.73			3.73	0.0		3.73	2.5393	
2030	3.73			3.73	0.0		3.73	2.5393	
2045	3.73			3.73	0.0		3.73	2.5393	
2050	3.79			3.79	0.0		3.79	2.5393	
2055	4.04			4.04	11.0		4.04	2.5431	
2100	4.14			4.14	181.0		4.14	2.6046	
2105	4.17			4.17	185.0		4.17	2.6674	
2110	4.24			4.24	143.0		4.24	2.7160	
2115	4.30			4.30	81.0		4.30	2.7436	
2120	4.31			4.31	123.0		4.31	2.7854	
2125	4.33			4.33	94.0		4.33	2.8173	
2130	4.35			4.35	49.0		4.35	2.8339	
2135	4.36			4.36	38.0		4.36	2.8469	
2140	4.36			4.36	44.0		4.36	2.8618	
2145	4.37			4.37	38.0		4.37	2.8747	
2150	4.37			4.37	29.0		4.37	2.8846	
2155	4.37			4.37	22.0		4.37	2.8921	
2200	4.37			4.37	16.0		4.37	2.9029	
2215	4.37			4.37	8.5		4.37	2.9116	
2230	4.37			4.37	5.0		4.37	2.9167	
2245	4.37			4.37	1.0		4.37	2.9177	
2300	4.37			4.37	0.0		4.37	2.9177	
2315	4.39			4.39	1.0		4.39	2.9187	
2330	4.43			4.43	9.2		4.43	2.9250	
2335	4.50			4.50	8.0		4.50	2.9277	
2340	4.66			4.66	16.0		4.66	2.9331	
2345	4.77			4.77	93.0		4.77	2.9647	
2350	4.97			4.97	154.0		4.97	3.0171	
2355	5.19			5.19	87.0		5.19	3.0466	
2400	5.27			5.27	183.0		5.27	3.0777	
JUNE 4									
0000	5.27			5.27	183.0		5.27	3.1048	
0005	5.29			5.29	231.0		5.29	3.1873	
0010	5.31			5.31	353.0		5.31	3.3073	
0015	5.31			5.31	380.0		5.31	3.4364	
0020	5.31			5.31	204.0		5.31	3.5037	

STORM RAINFALL AND RUNOFF RECORD									
SIA. NO.	EST. OF RUNOFF FROM SEM. S. STATION, CENTER, FT WORTH, TEX.				STORM OF JUNE 3-4, 1973				1973 WATER YEAR
DATE & TIME	2-5T				GAGE NUMBER	PRECIP. IN.	ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE I _q FT ³ /S	ACCUM. RUNOFF I _q
JUNE 4									
0025	5.31					5.31		98.0	3.5390
0030	5.33					5.33		51.0	3.5564
0035	5.34					5.34		85.0	3.5852
0040	5.34					5.34		50.0	3.6022
0045	5.34					5.34		5.0	3.6039
0050	5.34					5.34		4.0	3.6053
0055	5.34					5.34		8.0	3.6060
0100	5.34					5.34		10.0	3.6114
0105	5.34					5.34		7.0	3.6138
0110	5.34					5.34		5.0	3.6155
0115	5.34					5.34		4.5	3.6185
0130	5.34					5.34		3.0	3.6216
0145	5.34					5.34		1.7	3.6233
0200	5.34					5.34		0.5	3.6238
0215	5.34					5.34		0.2	3.6240
0230	5.34					5.34		0.0	3.6240
2400	5.34					5.34		0.0	3.6240

HYDROGRAPH AND MASS CURVES
for
STORM OF JUNE 3-4, 1973
SEMINARY SOUTH SHOPPING CENTER AT
FORT WORTH, TEXAS
Drainage Area 0.38 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

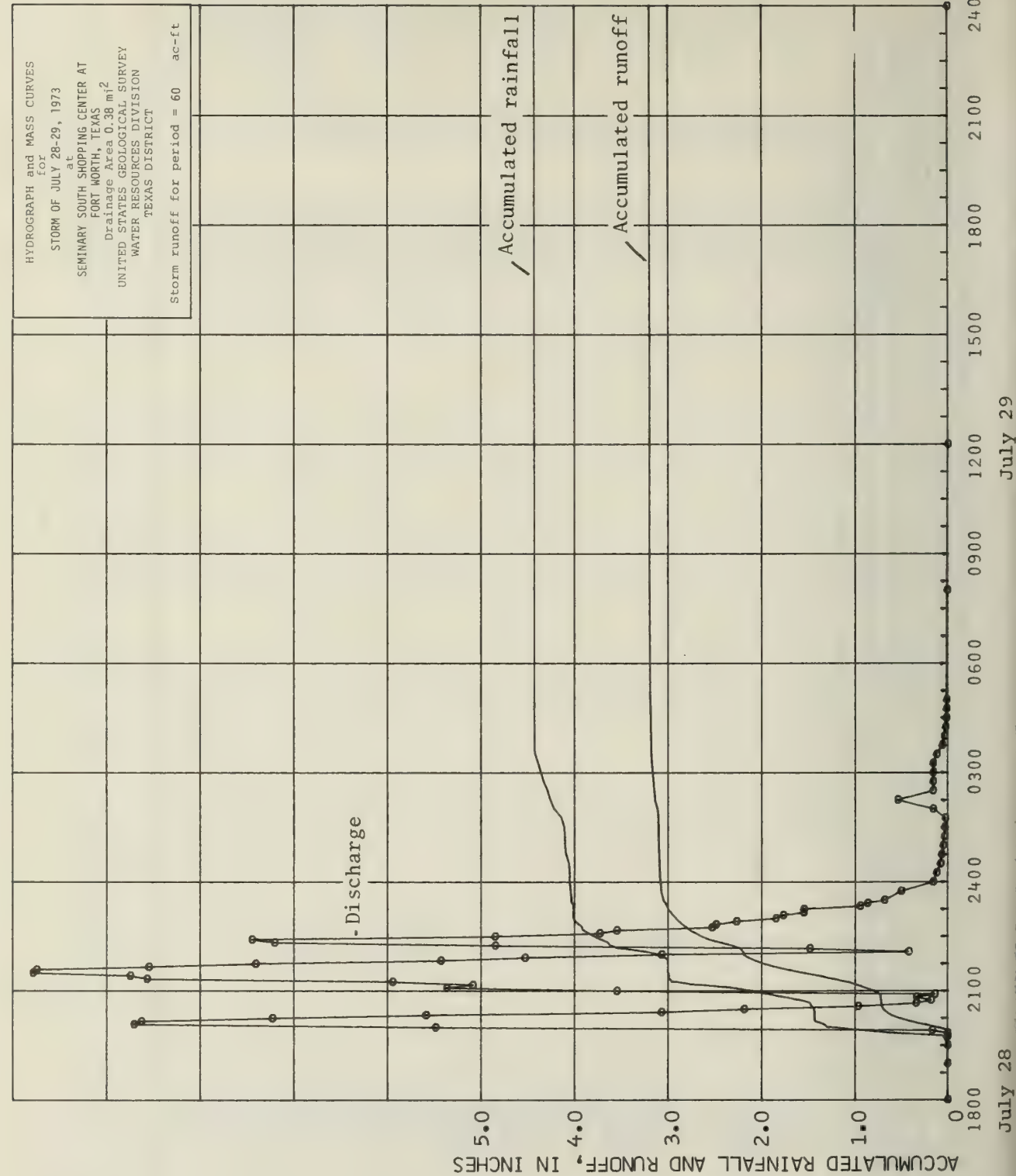
Storm runoff for period = 70 ac-ft



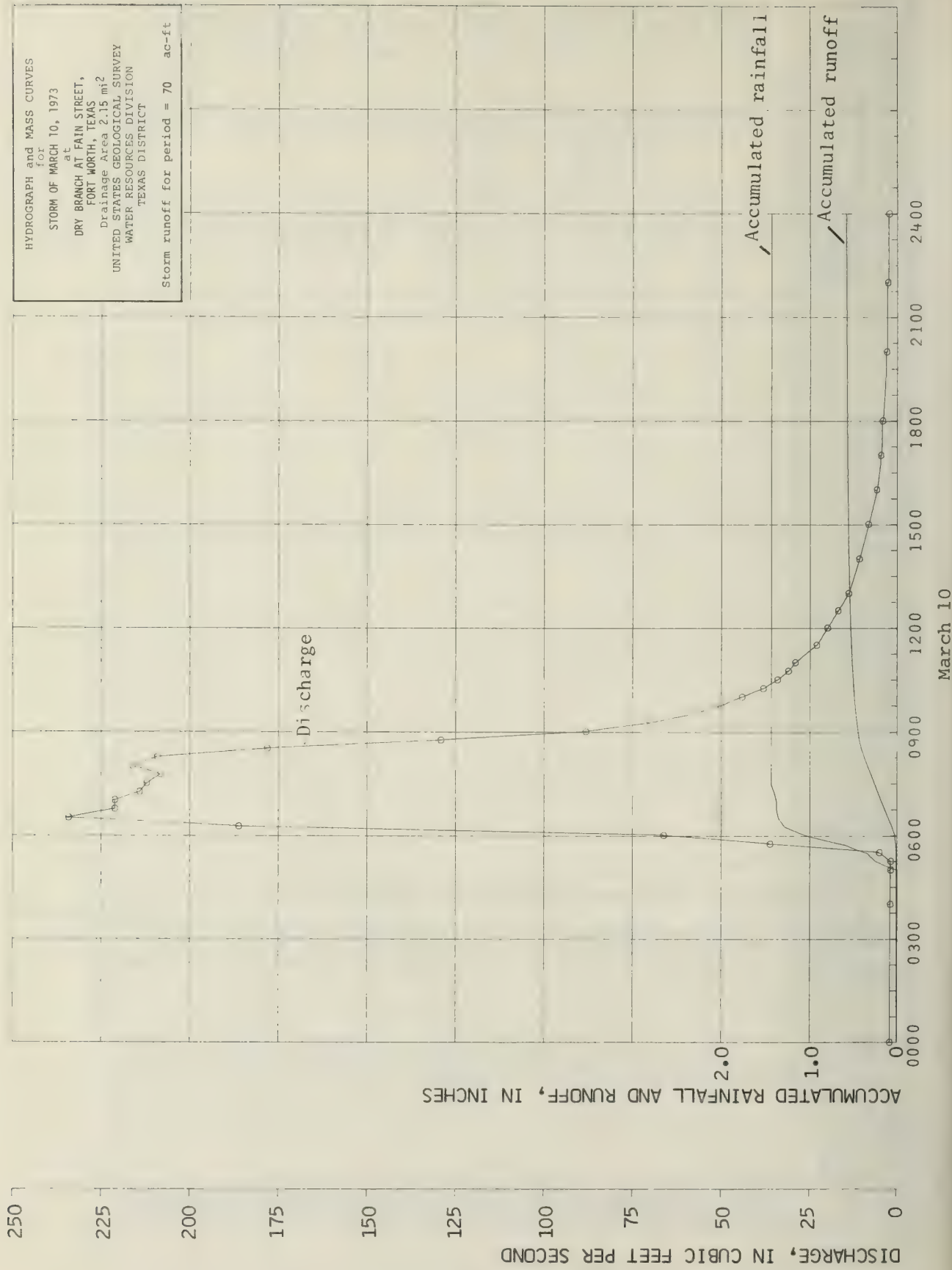
STORM RAINFALL AND RUNOFF RECORD									
STA. NO.	1973 WATER YEAR								
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT NORTH, TEX.	JULY 28-29, 1973								
DATE & TIME	2-ST	G A G E	N U M B E R	PRECIP. IN.	DISCHARGE IN	ACCUM. WEIGHTED PRECIP. IN.	FT ³ /S	ACCUM. RUNOFF IN.	
JULY 28									
0000	0.0			0.0	0.0	0.0	0.0	0.0004	
1900	0.0			0.0	0.1	0.0	0.1	0.0036	
1930	0.0			0.0	0.1	0.0	0.1	0.0037	
1945	0.05			0.05		0.05		0.0037	
1950	0.61			0.61	0.1	0.61	0.1	0.0038	
1955	0.98			0.98	8.5	0.98	8.5	0.0067	
2000	1.29			1.29	274.0	1.29	274.0	0.0998	
2005	1.33			1.33	435.0	1.33	435.0	0.2476	
2010	1.42			1.42	431.0	1.42	431.0	0.3941	
2015	1.42			1.42	361.0	1.42	361.0	0.5167	
2020	1.42			1.42	279.0	1.42	279.0	0.6115	
2025	1.42			1.42	153.0	1.42	153.0	0.6635	
2030	1.43			1.43	109.0	1.43	109.0	0.7006	
2035	1.46			1.46	49.0	1.46	49.0	0.7169	
2040	1.47			1.47	17.0	1.47	17.0	0.7227	
2045	1.61			1.61	9.0	1.61	9.0	0.7257	
2050	1.79			1.79	17.0	1.79	17.0	0.7315	
2055	1.95			1.95	7.0	1.95	7.0	0.7339	
2100	2.12			2.12	177.0	2.12	177.0	0.7940	
2105	2.35			2.35	268.0	2.35	268.0	0.8851	
2110	2.73			2.73	254.0	2.73	254.0	0.9714	
2115	2.95			2.95	297.0	2.95	297.0	1.0723	
2120	2.98			2.98	429.0	2.98	429.0	1.2178	
2125	2.98			2.98	437.0	2.98	437.0	1.3663	
2130	2.99			2.99	489.0	2.99	489.0	1.5325	
2135	2.99			2.99	487.0	2.99	487.0	1.6979	
2140	2.99			2.99	427.0	2.99	427.0	1.8430	
2145	2.99			2.99	370.0	2.99	370.0	1.9688	
2150	2.99			2.99	271.0	2.99	271.0	2.0609	
2155	3.03			3.03	226.0	3.03	226.0	2.1377	
2200	3.11			3.11	153.0	3.11	153.0	2.1897	
2205	3.28			3.28	21.0	3.28	21.0	2.1968	
2210	3.53			3.53	74.0	3.53	74.0	2.2219	
2215	3.61			3.61	242.0	3.61	242.0	2.3042	
2220	3.64			3.64	360.0	3.64	360.0	2.4265	
2225	3.72			3.72	372.0	3.72	372.0	2.5529	
2230	3.79			3.79	242.0	3.79	242.0	2.6352	
2235	3.85			3.85	186.0	3.85	186.0	2.6984	
2240	3.90			3.90	177.0	3.90	177.0	2.7585	

STORM RAINFALL AND RUNOFF RECORD									
STA. NO.		1973 WATER YEAR							
EST. OF RUNOFF FROM SEM. S. SHOP. CENTER, FT WORTH, TEX. STORM OF JULY 28-29, 1973									
DATE & TIME	2-ST	G A G E		N U M B E R		ACCUM. WEIGHTED PRECIP.		DISCHARGE IN	
		I	I	I	I	I N.	FT ³ /S	I N.	IN.
JULY 28									
2245	3.91					3.91		126.0	2.8013
2250	3.95					3.95		124.0	2.8435
2255	3.99					3.99		113.0	2.8819
2300	4.00					4.00		92.0	2.9131
2305	4.00					4.00		88.0	2.9430
2310	4.00					4.00		77.0	2.9692
2315	4.00					4.00		77.0	2.9954
2320	4.00					4.00		47.0	3.0113
2325	4.02					4.02		43.0	3.0260
2330	4.02					4.02		34.0	3.0491
2345	4.03					4.03		25.0	3.0746
2400	4.04					4.04		8.0	3.0786
JULY 29									
0000	4.04					4.04		8.0	3.0827
0015	4.04					4.04		6.0	3.0888
0030	4.05					4.05		4.0	3.0929
0045	4.08					4.08		3.4	3.0964
0100	4.09					4.09		2.6	3.0990
0115	4.09					4.09		2.0	3.1011
0130	4.10					4.10		1.8	3.1029
0145	4.13					4.13		1.5	3.1044
0200	4.21					4.21		8.1	3.1127
0215	4.25					4.25		27.0	3.1402
0230	4.28					4.28		8.0	3.1484
0245	4.32					4.32		8.0	3.1565
0300	4.35					4.35		8.0	3.1647
0315	4.38					4.38		8.0	3.1728
0330	4.41					4.41		6.0	3.1789
0345	4.42					4.42		3.0	3.1820
0400	4.42					4.42		2.0	3.1840
0415	4.42					4.42		1.4	3.1855
0430	4.43					4.43		0.9	3.1864
0445	4.43					4.43		0.8	3.1872
0500	4.43					4.43		0.8	3.1922
0800	4.43					4.43		0.4	3.1979
1200	4.43					4.43		0.0	3.1979
2400	4.43					4.43		0.0	3.1979

DISCHARGE, IN CUBIC FEET PER SECOND



STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048600									
DRY BRANCH AT FAIN STREET, FORT WORTH, TEX.									
STORM OF MARCH 10, 1973									
DATE & TIME	G A G E		N U M B E R		P R E C I P .		D I S C H A R G E		ACCUM. RUNOFF
	1-DB	2-DB			IN.	FT ³ /S	IN.		
MAR 10									
0000	0.0	0.0			0.0	2.2		0.0032	
0400	0.0	0.0			0.0	2.0		0.0068	
0500	0.0	0.0			0.0	1.9		0.0076	
0515	0.30	0.20			0.25	1.9		0.0080	
0530	0.37	0.34			0.35	5.1		0.0089	
0545	0.75	0.49			0.62	36.0		0.0154	
0600	0.93	1.13			1.03	66.0		0.0273	
0615	1.02	1.53			1.27	186.0		0.0608	
0630	1.10	1.60			1.35	234.0		0.1029	
0645	1.10	1.65			1.38	221.0		0.1428	
0700	1.10	1.65			1.38	221.0		0.1826	
0715	1.10	1.70			1.40	214.0		0.2211	
0730	1.10	1.77			1.44	212.0		0.2593	
0745	1.10	1.77			1.44	208.0		0.2968	
0800	1.10	1.77			1.44	216.0		0.3357	
0815	1.10	1.77			1.44	209.0		0.3734	
0830	1.10	1.77			1.44	178.0		0.4055	
0845	1.10	1.77			1.44	129.0		0.4287	
0900	1.10	1.77			1.44	88.0		0.4446	
0915	1.10	1.77			1.44	70.0		0.4572	
0930	1.10	1.77			1.44	58.0		0.4676	
0945	1.10	1.77			1.44	50.0		0.4767	
1000	1.10	1.77			1.44	44.0		0.4846	
1015	1.10	1.77			1.44	38.0		0.4914	
1030	1.10	1.77			1.44	34.0		0.4976	
1045	1.10	1.77			1.44	31.0		0.5031	
1100	1.10	1.77			1.44	29.0		0.5110	
1130	1.10	1.77			1.44	23.0		0.5193	
1200	1.10	1.77			1.44	20.0		0.5265	
1230	1.10	1.77			1.44	17.0		0.5326	
1300	1.10	1.77			1.44	14.0		0.5402	
1400	1.10	1.77			1.44	11.0		0.5481	
1500	1.10	1.77			1.44	8.4		0.5541	
1600	1.10	1.77			1.44	6.0		0.5585	
1700	1.10	1.77			1.44	4.8		0.5619	
1800	1.10	1.77			1.44	4.3		0.5666	
2000	1.10	1.77			1.44	3.2		0.5712	
2200	1.10	1.77			1.44	2.8		0.5752	
2400	1.10	1.77			1.44	2.4		0.5770	

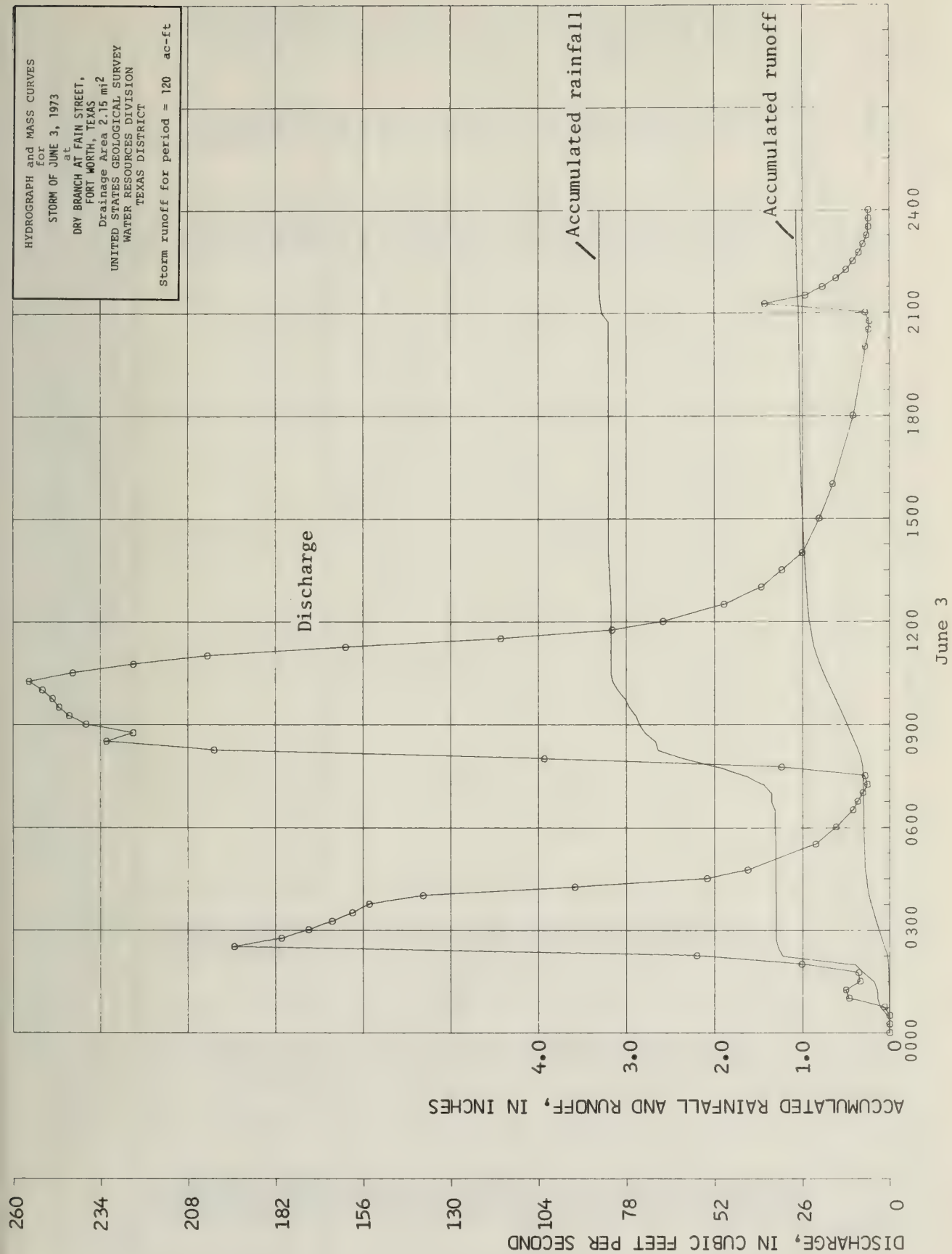


STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048600		1973 WATER YEAR							
DRY BRANCH AT FAIN STREET, FORT WORTH, TEX.									
STORM OF JUNE 3, 1973									
DATE & TIME	G A G E			P R E C I P I T A T I O N			D I S C H A R G E		
	1-DB	2-DB		IN.	WEIGHTED	ACCUM.	IN	FT ³ /S	IN.
JUNE 3									
0000	0.0	0.0		0.0		0.0	0.1	0.0000	0.0000
0015	0.0	0.0		0.0		0.0	0.1	0.0000	0.0000
0030	0.0	0.05		0.07		0.02	0.1	0.0000	0.0000
0045	0.06	0.17		0.11		0.11	1.6	0.0003	0.0003
0100	0.10	0.19		0.14		0.14	12.0	0.0025	0.0025
0115	0.10	0.20		0.15		0.15	13.0	0.0048	0.0048
0130	0.13	0.24		0.19		0.19	8.8	0.0064	0.0064
0145	0.23	0.37		0.30		0.30	9.2	0.0021	0.0021
0200	0.28	0.52		0.40		0.40	26.0	0.0127	0.0127
0215	1.14	1.30		1.22		1.22	57.0	0.0230	0.0230
0230	1.15	1.40		1.27		1.27	194.0	0.0580	0.0580
0245	1.20	1.40		1.30		1.30	180.0	0.0904	0.0904
0300	1.20	1.40		1.30		1.30	172.0	0.1214	0.1214
0315	1.20	1.40		1.30		1.30	165.0	0.1511	0.1511
0330	1.20	1.40		1.30		1.30	159.0	0.1798	0.1798
0345	1.20	1.40		1.30		1.30	154.0	0.2075	0.2075
0400	1.20	1.40		1.30		1.30	138.0	0.2324	0.2324
0415	1.20	1.41		1.30		1.30	93.0	0.2491	0.2491
0430	1.20	1.41		1.30		1.30	54.0	0.2589	0.2589
0445	1.20	1.41		1.30		1.30	42.0	0.2740	0.2740
0530	1.20	1.41		1.30		1.30	22.0	0.2839	0.2839
0600	1.20	1.42		1.31		1.31	16.0	0.2897	0.2897
0630	1.20	1.42		1.31		1.31	11.0	0.2927	0.2927
0645	1.20	1.50		1.35		1.35	9.6	0.2944	0.2944
0700	1.20	1.50		1.35		1.35	8.0	0.2958	0.2958
0715	1.38	1.50		1.44		1.44	6.6	0.2970	0.2970
0730	1.60	1.68		1.64		1.64	7.3	0.2983	0.2983
0745	2.02	1.85		1.94		1.94	32.0	0.3041	0.3041
0800	2.25	2.40		2.32		2.32	102.0	0.3225	0.3225
0815	2.52	2.75		2.64		2.64	200.0	0.3585	0.3585
0830	2.55	2.78		2.66		2.66	232.0	0.4003	0.4003
0845	2.68	2.88		2.78		2.78	224.0	0.4407	0.4407
0900	2.73	2.96		2.84		2.84	238.0	0.4836	0.4836
0915	2.77	3.00		2.89		2.89	243.0	0.5273	0.5273
0930	2.82	3.10		2.96		2.96	246.0	0.5717	0.5717
0945	2.87	3.15		3.01		3.01	248.0	0.6164	0.6164
1000	2.93	3.25		3.09		3.09	251.0	0.6616	0.6616
1015	3.00	3.30		3.15		3.15	255.0	0.7075	0.7075
1030	3.02	3.32		3.17		3.17	242.0	0.7511	0.7511

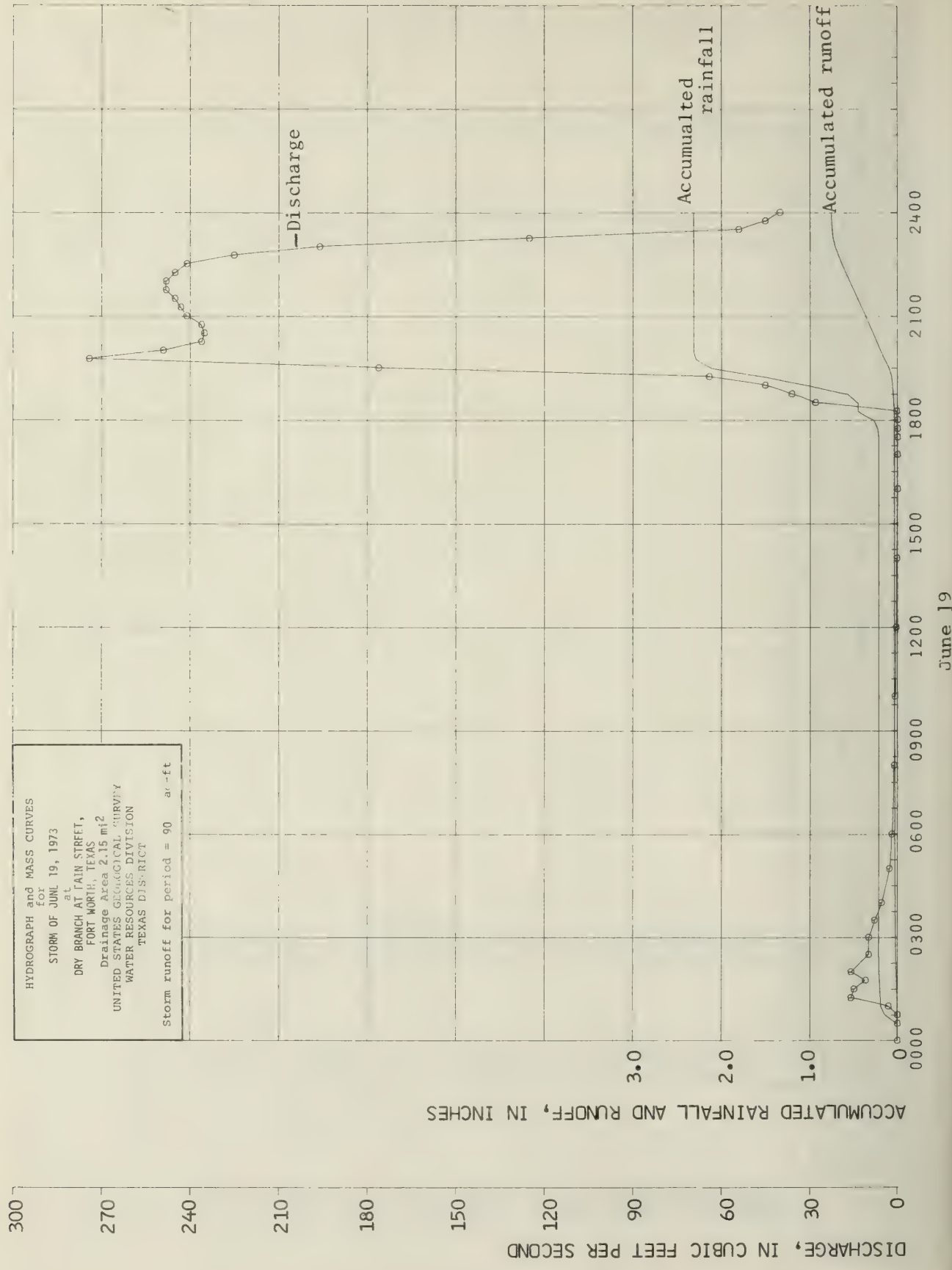
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048600									
DRY BRANCH AT FAIR STREET, FORT WORTH, TEX.									
STORM OF JUNE 3, 1973									
DATE & TIME	G A G E		N U M B E R	P R E C I P .		A C C U M .	D I S C H A R G E		A C C U M .
	1-D8	2-D8		IN.	WEIGHTED		IN	FT ³ /S	
JUNE 3									
1045	3.02	3.32			3.17		224.0		0.7915
1100	3.02	3.32			3.17		202.0		0.8279
1115	3.02	3.32			3.17		161.0		0.8569
1130	3.02	3.32			3.17		115.0		0.8776
1145	3.02	3.32			3.17		82.0		0.8924
1200	3.02	3.32			3.17		67.0		0.9105
1230	3.02	3.32			3.17		49.0		0.9282
1300	3.04	3.32			3.18		38.0		0.9419
1330	3.04	3.32			3.19		32.0		0.9534
1400	3.02	3.32			3.20		26.0		0.9675
1500	3.02	3.32			3.20		21.0		0.9826
1600	3.02	3.32			3.20		17.0		1.0010
1800	3.02	3.32			3.20		11.0		1.0168
2000	3.02	3.32			3.20		7.3		1.0234
2030	3.02	3.32			3.20		6.3		1.0251
2045	3.02	3.32			3.20		6.0		1.0262
2100	3.02	3.47			3.27		7.3		1.0275
2115	3.11	3.47			3.29		37.0		1.0342
2130	3.11	3.49			3.30		25.0		1.0387
2145	3.11	3.50			3.30		20.0		1.0423
2200	3.11	3.50			3.30		16.0		1.0451
2215	3.11	3.50			3.30		13.0		1.0475
2230	3.11	3.50			3.30		11.0		1.0495
2245	3.11	3.50			3.30		9.2		1.0511
2300	3.11	3.50			3.30		8.0		1.0526
2315	3.11	3.50			3.30		6.9		1.0538
2330	3.11	3.50			3.30		6.3		1.0549
2345	3.11	3.50			3.30		6.3		1.0561
2400	3.11	3.50			3.30		6.3		1.0567

HYDROGRAPH and MASS CURVES
for
STORM OF JUNE 3, 1973
at
DRY BRANCH AT FAIN STREET,
FORT WORTH, TEXAS
Drainage Area 2.15 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 120 ac-ft



STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 03048600									
DRY BRANCH AT FAIR STREET, FORT WORTH, TEX.									
STORM OF JUNE 19, 1973									
DATE & TIME	G A G E				PRECIP. IN.	DISCHARGE IN			
	1-D8	2-D8	N U M B E R			F T ³ / S		IN.	
JUNE 19									
0000	0.0	0.0			0.0	0.1	0.0000	0.1	0.0000
0030	0.0	0.0			0.0	0.1	0.0000	0.1	0.0000
0045	0.18	0.12			0.15	3.2	0.0006	3.2	0.0006
0100	0.21	0.19			0.20	16.0	0.0035	16.0	0.0035
0115	0.21	0.20			0.21	15.0	0.0062	15.0	0.0062
0130	0.22	0.20			0.21	11.0	0.0082	11.0	0.0082
0145	0.23	0.20			0.22	16.0	0.0125	16.0	0.0125
0200	0.24	0.20			0.22	10.0	0.0161	10.0	0.0161
0230	0.25	0.20			0.22	10.0	0.0197	10.0	0.0197
0300	0.25	0.20			0.22	8.0	0.0226	8.0	0.0226
0400	0.25	0.20			0.22	5.7	0.0257	5.7	0.0257
0500	0.25	0.20			0.22	3.0	0.0278	3.0	0.0278
0600	0.25	0.20			0.22	2.2	0.0302	2.2	0.0302
0800	0.25	0.20			0.22	1.4	0.0322	1.4	0.0322
1000	0.25	0.20			0.22	1.1	0.0338	1.1	0.0338
1200	0.25	0.20			0.22	0.6	0.0347	0.6	0.0347
1400	0.25	0.20			0.22	0.4	0.0352	0.4	0.0352
1600	0.25	0.20			0.22	0.1	0.0354	0.1	0.0354
1700	0.25	0.20			0.22	0.1	0.0355	0.1	0.0355
1730	0.25	0.20			0.22	0.1	0.0355	0.1	0.0355
1745	0.27	0.20			0.23	0.1	0.0355	0.1	0.0355
1800	0.29	0.27			0.28	0.1	0.0355	0.1	0.0355
1815	0.55	0.37			0.46	0.4	0.0356	0.4	0.0356
1830	0.55	0.37			0.46	28.0	0.0406	28.0	0.0406
1845	0.76	0.39			0.57	36.0	0.0471	36.0	0.0471
1900	1.10	0.94			1.02	45.0	0.0552	45.0	0.0552
1915	1.50	1.50			1.50	64.0	0.0668	64.0	0.0668
1930	2.08	2.13			2.10	176.0	0.0985	176.0	0.0985
1945	2.32	2.25			2.28	274.0	0.1479	274.0	0.1479
2000	2.34	2.29			2.31	249.0	0.1927	249.0	0.1927
2015	2.34	2.29			2.31	236.0	0.2352	236.0	0.2352
2030	2.34	2.29			2.31	235.0	0.2776	235.0	0.2776
2045	2.34	2.29			2.31	236.0	0.3201	236.0	0.3201
2100	2.34	2.29			2.31	241.0	0.3635	241.0	0.3635
2115	2.34	2.29			2.31	243.0	0.4073	243.0	0.4073
2130	2.34	2.29			2.31	245.0	0.4515	245.0	0.4515
2145	2.34	2.29			2.31	248.0	0.4962	248.0	0.4962
2200	2.34	2.29			2.31	248.0	0.5408	248.0	0.5408



STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048600									
DRY BRANCH AT FAIN STREET, FORT WORTH, TEX.									
STORM OF JULY 15, 1973									
G A G E N U M B E R									
DATE & TIME									
1-D8 2-D8									
JULY 15									
0000 0.0 0.0 18.0 0.0 0.0016									
0015 0.0 0.0 30.0 0.0 0.0070									
0030 0.0 0.0 37.0 0.0 0.0137									
0045 0.0 0.0 45.0 0.0 0.0218									
0100 0.0 0.0 44.0 0.0 0.0297									
0115 0.0 0.0 37.0 0.0 0.0364									
0130 0.0 0.0 30.0 0.0 0.0445									
0200 0.0 0.0 21.0 0.0 0.0559									
0300 0.0 0.0 11.0 0.0 0.0638									
0400 0.0 0.0 7.6 0.0 0.0693									
0500 0.0 0.0 5.4 0.0 0.0717									
0515 0.0 0.0 4.8 0.0 0.0726									
0530 0.02 0.10 4.5 0.06 0.0734									
0545 0.02 0.33 4.5 0.17 0.0742									
0600 0.35 0.59 23.0 0.47 0.0783									
0615 0.70 1.01 54.0 0.86 0.0881									
0630 1.00 1.10 107.0 1.05 0.1073									
0645 1.25 1.10 145.0 1.18 0.1335									
0700 1.37 1.30 155.0 1.34 0.1614									
0715 1.43 1.45 183.0 1.44 0.1944									
0730 1.50 1.55 197.0 1.52 0.2299									
0745 1.68 1.70 196.0 1.69 0.2652									
0800 1.70 1.73 212.0 1.71 0.3034									
0815 1.82 1.79 235.0 1.80 0.3457									
0830 1.82 1.82 245.0 1.82 0.3899									
0845 1.82 1.90 256.0 1.86 0.4360									
0900 1.82 1.90 246.0 1.86 0.4803									
0915 1.82 1.90 248.0 1.86 0.5250									
0930 1.82 1.90 234.0 1.86 0.5672									
0945 1.82 1.90 233.0 1.86 0.6091									
1000 1.82 1.90 227.0 1.86 0.6501									
1015 1.82 1.90 219.0 1.86 0.6895									
1030 1.82 1.90 196.0 1.86 0.7248									
1045 1.82 1.90 153.0 1.86 0.7524									
1100 1.82 1.90 88.0 1.86 0.7762									
1130 1.82 1.90 58.0 1.86 0.7971									
1200 1.82 1.90 49.0 1.86 0.8103									
1215 1.87 1.92 44.0 1.89 0.8183									
1230 2.02 1.96 41.0 1.99 0.8256									

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0R048600		1973 WATER YEAR							
DRY BRANCH AT FAIN STREET, FORT WORTH, TEX.									
STORM OF JULY 15, 1973									
DATE & TIME	G A G E		N U M B E R		WEIGHTED PRECIP.		DISCHARGE IN		ACCUM. RUNOFF IN.
	1-DB	2-DB			IN.		FT ³ /S		
JULY 15									
1245	2.02	2.00				2.01	42.0	0.8332	
1300	2.02	2.00				2.01	42.0	0.8408	
1315	2.02	2.01				2.02	41.0	0.8482	
1330	2.05	2.02				2.03	41.0	0.8556	
1345	2.10	2.05				2.07	38.0	0.8624	
1400	2.15	2.10				2.13	45.0	0.8705	
1415	2.15	2.13				2.14	69.0	0.8829	
1430	2.15	2.13				2.14	93.0	0.8997	
1445	2.15	2.13				2.14	99.0	0.9175	
1500	2.15	2.13				2.14	93.0	0.9427	
1530	2.15	2.13				2.14	69.0	0.9675	
1600	2.15	2.13				2.14	54.0	0.9870	
1630	2.15	2.13				2.14	42.0	1.0021	
1700	2.15	2.13				2.14	36.0	1.0216	
1800	2.15	2.13				2.14	26.0	1.0403	
1900	2.15	2.13				2.14	20.0	1.0620	
2100	2.15	2.13				2.14	13.0	1.0854	
2400	2.15	2.13				2.14	7.3	1.0933	

HYDROGRAPH and MASS CURVES
for
STORM OF JULY 15, 1974
at
DRY BRANCH AT FAIN STREET,
FORT WORTH, TEXAS
Drainage Area 2.15 mi.²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 120 ac-ft

ACCUMULATED RAINFALL AND RUNOFF, IN INCHES

DISCHARGE, IN CUBIC FEET PER SECOND

270

240

210

180

150

120

90

60

30

0

-Discharge

Accumulated rainfall

Accumulated runoff

July 15

2400

2100

1800

1500

1200

900

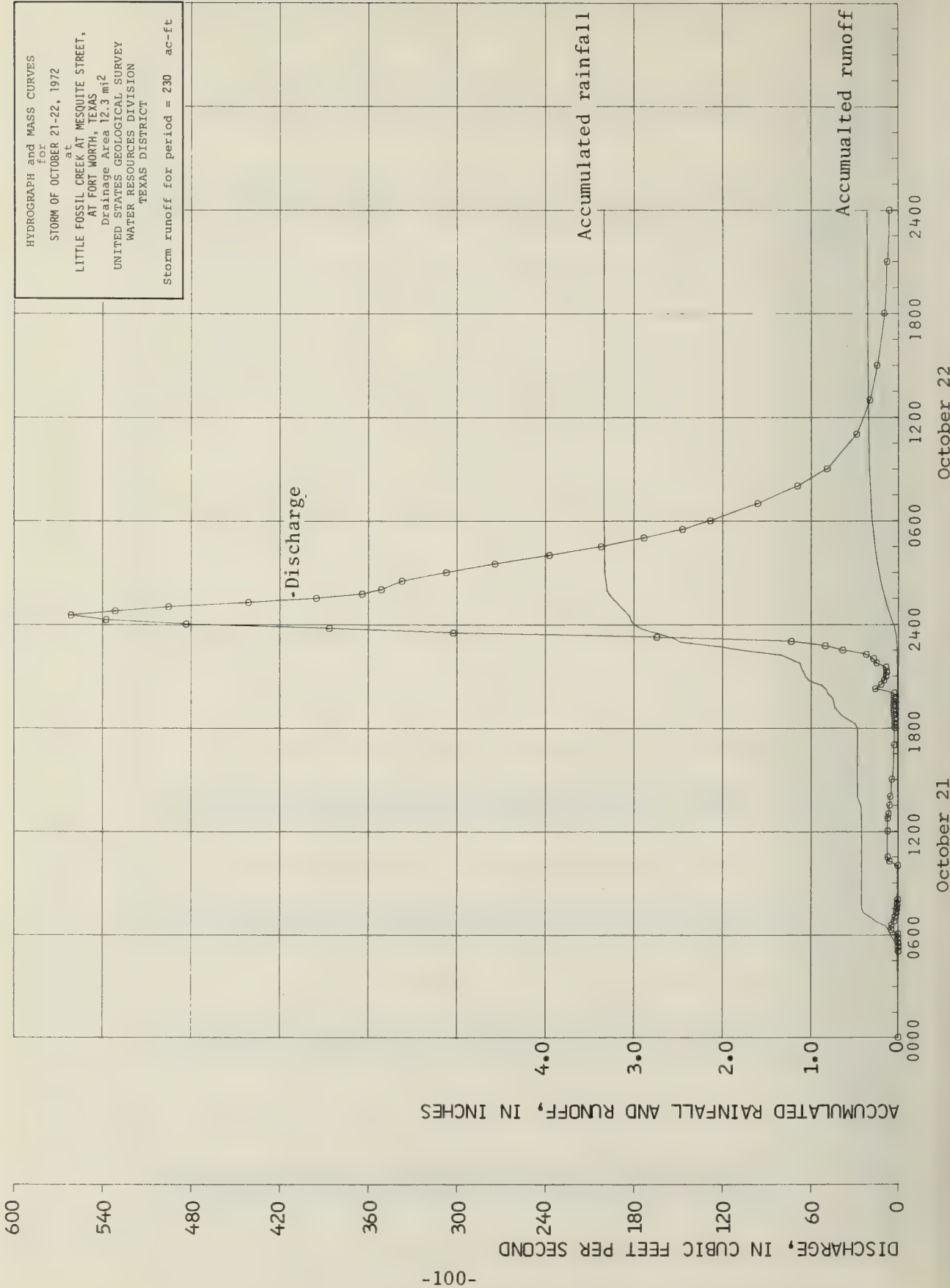
600

300

0

STORM RAINFALL AND RUNOFF RECORD									
STA. NO.	1973 WATER YEAR								
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF OCT. 21-22, 1972									
DATE & TIME	1-LF	2-LF	3-LF	G A G E	N U M B E R	WEIGHTED PRECIP.	DISCHARGE IN	ACCUM. IN.	ACCUM. RUNOFF
							FT ³ /S		
OCT. 21									
0000	0.0	0.0	0.0			0.0	0.1	0.0000	0.0000
0500	0.04	0.03	0.01			0.03	0.1	0.0001	0.0001
0515	0.04	0.03	0.02			0.03	0.1	0.0001	0.0001
0530	0.05	0.03	0.03			0.04	0.1	0.0001	0.0001
0545	0.06	0.11	0.05			0.07	0.3	0.0001	0.0001
0600	0.07	0.13	0.10			0.10	0.4	0.0001	0.0001
0615	0.10	0.16	0.11			0.12	5.0	0.0003	0.0003
0630	0.14	0.24	0.11			0.15	5.0	0.0004	0.0004
0645	0.17	0.34	0.28			0.26	3.0	0.0005	0.0005
0700	0.24	0.37	0.36			0.32	2.6	0.0006	0.0006
0715	0.31	0.45	0.45			0.40	1.5	0.0006	0.0006
0730	0.36	0.46	0.46			0.43	1.0	0.0007	0.0007
0745	0.36	0.46	0.47			0.43	0.7	0.0007	0.0007
0900	0.36	0.46	0.47			0.43	0.6	0.0008	0.0008
1000	0.36	0.46	0.47			0.43	0.5	0.0008	0.0008
1015	0.36	0.46	0.47			0.43	6.2	0.0010	0.0010
1030	0.36	0.46	0.47			0.43	7.5	0.0019	0.0019
1200	0.36	0.46	0.47			0.43	7.5	0.0029	0.0029
1245	0.36	0.46	0.47			0.43	7.5	0.0034	0.0034
1300	0.36	0.46	0.47			0.43	7.0	0.0037	0.0037
1330	0.37	0.47	0.47			0.44	6.2	0.0041	0.0041
1400	0.44	0.50	0.49			0.48	5.8	0.0047	0.0047
1500	0.44	0.51	0.49			0.48	4.7	0.0056	0.0056
1700	0.44	0.51	0.49			0.48	3.0	0.0061	0.0061
1800	0.44	0.51	0.49			0.48	2.6	0.0063	0.0063
1815	0.44	0.53	0.53			0.50	2.6	0.0064	0.0064
1830	0.54	0.62	0.59			0.58	2.6	0.0065	0.0065
1845	0.69	0.67	0.62			0.66	3.0	0.0066	0.0066
1900	0.73	0.72	0.66			0.70	3.3	0.0067	0.0067
1915	0.78	0.73	0.70			0.73	3.3	0.0068	0.0068
1930	0.79	0.74	0.71			0.74	3.3	0.0069	0.0069
1945	0.82	0.75	0.71			0.76	3.0	0.0070	0.0070
2000	0.89	0.82	0.74			0.81	3.0	0.0071	0.0071
2015	0.91	0.83	0.76			0.83	16.0	0.0076	0.0076
2030	0.92	0.90	0.85			0.89	12.0	0.0080	0.0080
2045	0.94	1.08	1.05			1.02	10.0	0.0083	0.0083
2100	1.04	1.10	1.06			1.06	8.5	0.0086	0.0086
2115	1.06	1.14	1.07			1.08	8.0	0.0088	0.0088
2130	1.08	1.15	1.11			1.11	8.5	0.0091	0.0091

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048850									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF OCT. 21-22, 1972									
DATE & TIME	1-LF	2-LF	3-LF	GAGE NUMBER	PRECIP. IN.	ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE IN	FT ³ /S	IN. ACCUM. RUNOFF
OCT. 21									
2145	1.11	1.16	1.11		1.12		15.0		0.0095
2200	1.14	1.34	1.23		1.23		17.0		0.0101
2215	1.22	1.54	1.33		1.35		22.0		0.0108
2230	1.75	1.99	1.73		1.74		38.0		0.0120
2245	2.37	2.14	1.73		2.05		50.0		0.0135
2300	2.66	2.75	2.15		2.47		73.0		0.0158
2315	2.79	2.86	2.20		2.57		164.0		0.0210
2330	2.85	3.16	2.36		2.73		302.0		0.0305
2345	3.13	3.25	2.51		2.91		386.0		0.0427
2400	3.28	3.31	2.56		2.99		483.0		0.0503
OCT. 22									
0000	3.28	3.31	2.56		2.99		483.0		0.0579
0015	3.29	3.37	2.61		3.03		537.0		0.0748
0030	3.30	3.38	2.64		3.05		561.0		0.0925
0045	3.34	3.42	2.69		3.09		531.0		0.1092
0100	3.41	3.48	2.72		3.14		495.0		0.1248
0115	3.44	3.52	2.77		3.19		441.0		0.1387
0130	3.51	3.54	2.82		3.23		395.0		0.1511
0145	3.57	3.57	2.85		3.27		364.0		0.1626
0200	3.58	3.59	2.90		3.30		351.0		0.1792
0230	3.58	3.61	2.92		3.32		337.0		0.2004
0300	3.60	3.62	2.93		3.33		307.0		0.2197
0330	3.60	3.62	2.93		3.33		274.0		0.2370
0400	3.60	3.62	2.93		3.33		237.0		0.2519
0430	3.60	3.62	2.93		3.33		202.0		0.2646
0500	3.61	3.62	2.93		3.33		173.0		0.2755
0530	3.62	3.62	2.93		3.34		147.0		0.2848
0600	3.63	3.62	2.93		3.34		128.0		0.2969
0700	3.63	3.62	2.93		3.34		96.0		0.3090
0800	3.63	3.62	2.93		3.34		69.0		0.3177
0900	3.63	3.62	2.93		3.34		49.0		0.3269
1100	3.63	3.62	2.93		3.34		29.0		0.3342
1300	3.63	3.62	2.93		3.34		20.0		0.3393
1500	3.63	3.62	2.93		3.34		15.0		0.3440
1800	3.63	3.62	2.93		3.34		10.0		0.3478
2100	3.63	3.62	2.93		3.34		8.0		0.3508
2400	3.63	3.62	2.93		3.34		6.2		0.3520

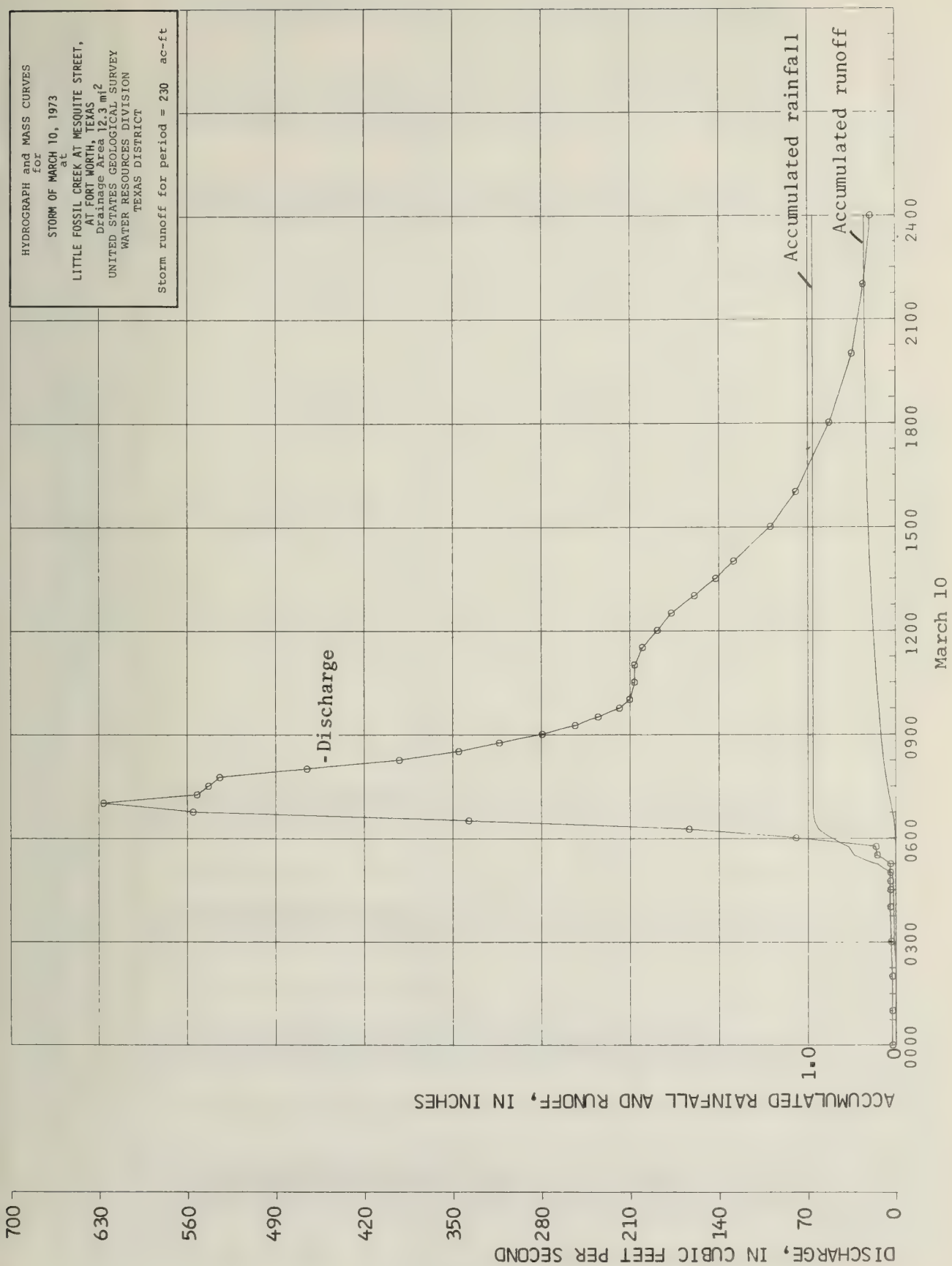


STORM RAINFALL AND RUNOFF RECORD												1973 WATER YEAR	
STA. NO. 08048850													
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX.													
STORM OF MARCH 10, 1973													
DATE & TIME	G A G E			N U M B E R			ACCUM. WEIGHTED PRECIP.		DISCHARGE IN	ACCUM. RUNOFF			
	1-LF	2-LF	3-LF	1	2	3	IN.	FT ³ /S		IN.			
MAR. 10													
0000	0.0	0.0	0.0				0.0	3.0		0.0002			
0100	0.02	0.0	0.0				0.01	3.0		0.0006			
0200	0.02	0.0	0.0				0.01	3.0		0.0009			
0300	0.06	0.02	0.02				0.03	4.0		0.0014			
0400	0.06	0.03	0.03				0.04	4.7		0.0019			
0430	0.06	0.03	0.04				0.04	4.7		0.0021			
0445	0.06	0.04	0.04				0.05	4.7		0.0023			
0500	0.07	0.07	0.04				0.06	4.7		0.0024			
0515	0.16	0.45	0.13				0.22	4.7		0.0026			
0530	0.49	0.49	0.46				0.48	15.0		0.0030			
0545	0.55	0.57	0.52				0.54	16.0		0.0035			
0600	0.59	0.60	0.92				0.73	79.0		0.0060			
0615	0.70	0.78	1.09				0.88	163.0		0.0112			
0630	0.78	0.84	1.10				0.93	337.0		0.0218			
0645	0.78	0.89	1.11				0.94	555.0		0.0393			
0700	0.78	0.89	1.11				0.94	626.0		0.0590			
0715	0.78	0.89	1.11				0.94	552.0		0.0764			
0730	0.78	0.89	1.11				0.94	543.0		0.0935			
0745	0.78	0.89	1.11				0.94	534.0		0.1103			
0800	0.78	0.89	1.11				0.94	465.0		0.1249			
0815	0.78	0.89	1.11				0.94	392.0		0.1373			
0830	0.78	0.89	1.11				0.94	345.0		0.1481			
0845	0.78	0.89	1.11				0.94	313.0		0.1580			
0900	0.78	0.89	1.11				0.94	279.0		0.1668			
0915	0.78	0.89	1.11				0.94	253.0		0.1747			
0930	0.78	0.89	1.11				0.94	235.0		0.1821			
0945	0.78	0.89	1.11				0.94	218.0		0.1890			
1000	0.78	0.89	1.11				0.94	210.0		0.1989			
1030	0.78	0.89	1.11				0.94	206.0		0.2119			
1100	0.78	0.89	1.11				0.94	206.0		0.2249			
1130	0.78	0.89	1.11				0.94	200.0		0.2375			
1200	0.78	0.89	1.11				0.94	188.0		0.2493			
1230	0.78	0.89	1.11				0.94	177.0		0.2605			
1300	0.78	0.89	1.11				0.94	159.0		0.2705			
1330	0.78	0.89	1.11				0.94	142.0		0.2794			
1400	0.78	0.89	1.11				0.94	128.0		0.2915			
1500	0.78	0.89	1.11				0.94	99.0		0.3040			
1600	0.78	0.89	1.11				0.94	79.0		0.3189			
1800	0.78	0.89	1.11				0.94	53.0		0.3323			

STATION NO. 08048850									
STORM PAINFALL AND RUNOFF RECORD									
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF MARCH 10, 1973									
DATE & TIME	G A G E			N U M B E R			1973 WATER YEAR		
	1-LF	2-LF	3-LF				DISCHARGE IN	ACCUM. PRECIP. IN.	ACCUM. RUNOFF IN.
MAR. 10									
2000	0.78	0.89	1.11				35.0	0.94	0.3411
2200	0.78	0.89	1.11				26.0	0.94	0.3477
2400	0.78	0.89	1.11				20.0	0.94	0.3502

HYDROGRAPH and MASS CURVES
for
at
STORM OF MARCH 10, 1973
LITTLE FOSSIL CREEK AT MESQUITE STREET,
AT FORT WORTH, TEXAS
Drainage Area 12.3 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 230 ac-ft



STA. NO. 08044450		STORM RAINFALL AND RUNOFF RECORD										1973 WATER YEAR	
LITTLE FOSSIL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF JULY 15, 1973													
DATE & TIME	1-LF	2-LF	3-LF	GAGE	NUMBER	STORM OF	JULY 15, 1973	ACCUM. PRECIP. IN.	DISCHARGE IN	FT ³ /S	ACCUM. RUNOFF IN.		
JULY 15													
0000	0.0	0.0	0.0					0.0		35.0	0.0011		
0030	0.0	0.0	0.0					0.0		36.0	0.0034		
0100	0.0	0.01	0.0					0.00		42.0	0.0060		
0130	0.0	0.02	0.0					0.00		74.0	0.0107		
0200	0.01	0.02	0.0					0.01		77.0	0.0180		
0300	0.02	0.02	0.0					0.01		74.0	0.0249		
0330	0.02	0.02	0.0					0.01		73.0	0.0295		
0400	0.02	0.02	0.0					0.01		76.0	0.0343		
0430	0.03	0.02	0.0					0.02		76.0	0.0391		
0500	0.03	0.03	0.0					0.02		77.0	0.0428		
0515	0.04	0.03	0.0					0.02		82.0	0.0453		
0530	0.04	0.03	0.0					0.02		89.0	0.0481		
0545	0.04	0.03	0.40					0.19		90.0	0.0510		
0600	0.05	0.04	0.63					0.29		92.0	0.0539		
0615	0.05	0.05	1.09					0.48		95.0	0.0569		
0630	0.20	0.24	1.36					0.69		139.0	0.0612		
0645	0.20	0.38	1.59					0.81		179.0	0.0669		
0700	0.27	0.46	1.69					0.90		218.0	0.0737		
0715	0.30	0.81	1.78					1.03		302.0	0.0833		
0730	0.38	0.89	1.85					1.11		507.0	0.0992		
0745	0.40	0.91	1.91					1.15		904.0	0.1277		
0800	0.40	0.91	2.01					1.19		1260.0	0.1674		
0815	0.40	0.92	2.10					1.23		1420.0	0.2121		
0830	0.40	0.94	2.14					1.25		1480.0	0.2587		
0845	0.40	0.94	2.14					1.25		1600.0	0.3091		
0900	0.40	0.94	2.14					1.25		1630.0	0.3605		
0915	0.40	0.95	2.14					1.25		1580.0	0.4102		
0930	0.40	0.95	2.14					1.25		1500.0	0.4575		
0945	0.41	0.95	2.14					1.25		1430.0	0.5025		
1000	0.41	0.96	2.14					1.26		1330.0	0.5444		
1015	0.41	0.96	2.14					1.26		1180.0	0.5816		
1030	0.41	0.96	2.14					1.26		1030.0	0.6140		
1045	0.41	0.96	2.14					1.26		880.0	0.6417		
1100	0.41	0.96	2.14					1.26		740.0	0.6650		
1115	0.41	0.96	2.14					1.26		616.0	0.6844		
1130	0.41	0.96	2.14					1.26		531.0	0.7011		
1145	0.50	0.96	2.14					1.32		447.0	0.7152		
1200	0.60	0.96	2.15					1.33		395.0	0.7277		
1215	0.63	1.00	2.19					1.36		356.0	0.7389		

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048850									
LITTLE FOSSL CREEK AT MESQUITE STREET, FORT WORTH, TEX. STORM OF JULY 15, 1973									
DATE & TIME	1-LF	2-LF	3-LF	G A G E	N U M B E R	ACCUM. WEIGHIED PRECIP. IN.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.	
JULY 15									
1230	0.63	1.09	2.38			1.46	321.0	0.7490	
1245	0.63	1.09	2.38			1.46	297.0	0.7583	
1300	0.65	1.16	2.38			1.49	287.0	0.7719	
1330	0.65	1.16	2.46			1.52	270.0	0.7889	
1400	0.65	1.17	2.50			1.54	260.0	0.8053	
1430	0.65	1.18	2.55			1.56	251.0	0.8211	
1500	0.68	1.18	2.55			1.57	237.0	0.8435	
1600	0.70	1.18	2.55			1.58	208.0	0.8697	
1700	0.70	1.18	2.55			1.58	185.0	0.8930	
1800	0.70	1.18	2.55			1.58	177.0	0.9153	
1900	0.70	1.18	2.55			1.58	137.0	0.9412	
2100	0.70	1.18	2.55			1.58	90.0	0.9582	
2200	0.70	1.18	2.55			1.58	73.0	0.9720	
2400	0.70	1.18	2.55			1.58	49.0	0.9782	

HYDROGRAPH AND MASS CURVES

for
STORM OF JULY 15, 1973

at

LITTLE FOSSIL CREEK AT MESQUITE STREET,

AT FORT WORTH, TEXAS

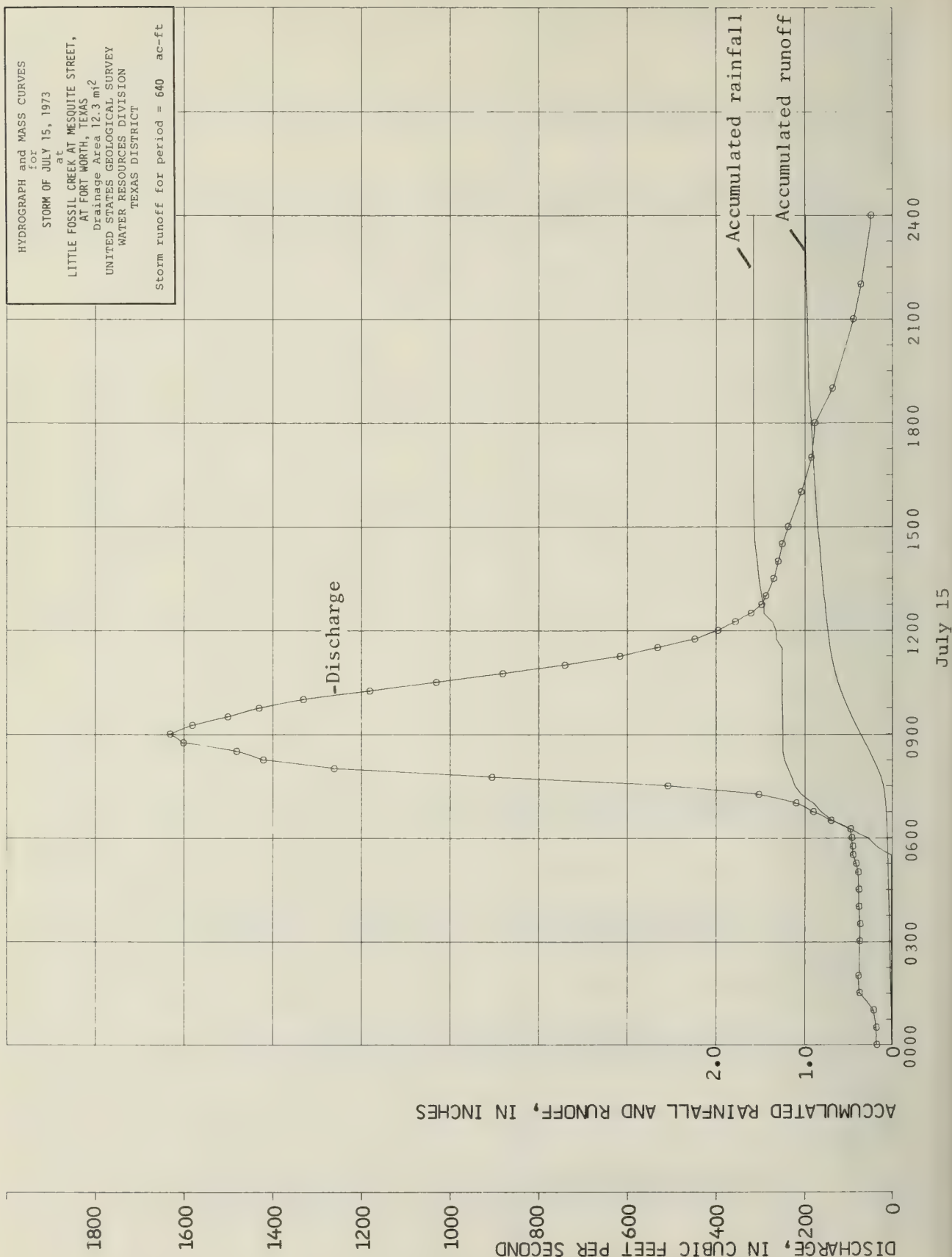
Drainage Area, 12.3 mi²

UNITED STATES GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

TEXAS DISTRICT

Storm runoff for period = 640 ac-ft

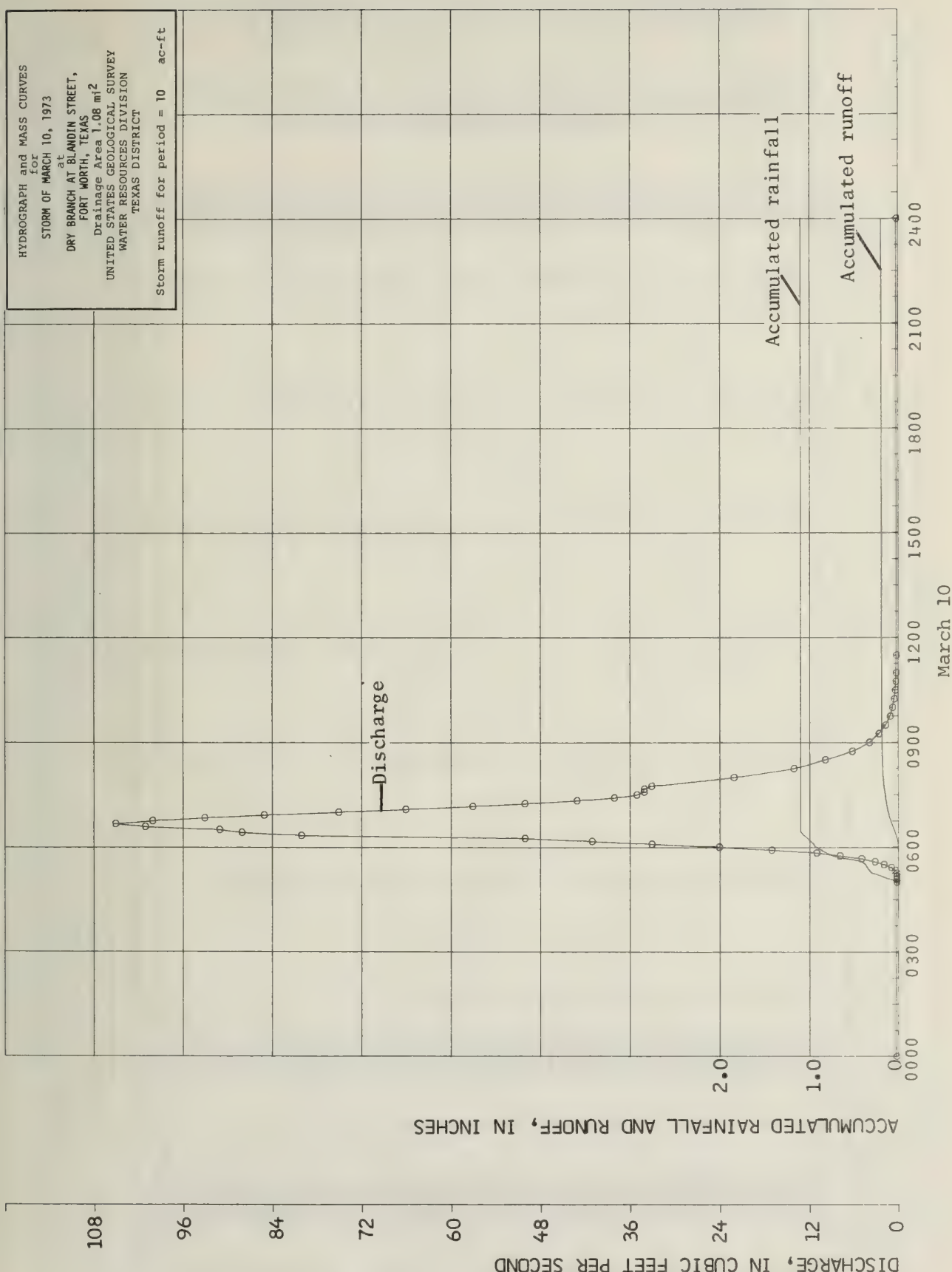


STA. NO. 08048550			STORM RAINFALL AND RUNOFF RECORD			1973 WATER YEAR		
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.			STORM OF MARCH 10, 1973			DISCHARGE ACCUM.		
DATE & TIME			G A G E N U M B E R			WEIGHTED PRECIP. IN. FT ³ /S IN.		
1-08								
MAP. 10								
0000	0.0					0.0	0.3	0.0009
0500	0.0					0.0	0.3	0.0018
0505	0.12					0.12	0.3	0.0018
0510	0.20					0.20	0.3	0.0019
0515	0.30					0.30	0.3	0.0019
0520	0.33					0.33	0.5	0.0020
0525	0.35					0.35	1.0	0.0021
0530	0.37					0.37	2.0	0.0023
0535	0.42					0.42	3.2	0.0027
0540	0.65					0.65	5.0	0.0033
0545	0.75					0.75	7.9	0.0042
0550	0.82					0.82	11.0	0.0056
0555	0.87					0.87	17.0	0.0076
0600	0.93					0.93	24.0	0.0105
0605	0.95					0.95	33.0	0.0144
0610	0.99					0.99	41.0	0.0193
0615	1.02					1.02	50.0	0.0253
0620	1.06					1.06	80.0	0.0349
0625	1.09					1.09	88.0	0.0454
0630	1.10					1.10	91.0	0.0563
0635	1.10					1.10	101.0	0.0683
0640	1.10					1.10	105.0	0.0809
0645	1.10					1.10	100.0	0.0928
0650	1.10					1.10	93.0	0.1040
0655	1.10					1.10	85.0	0.1141
0700	1.10					1.10	75.0	0.1231
0705	1.10					1.10	66.0	0.1310
0710	1.10					1.10	57.0	0.1378
0715	1.10					1.10	50.0	0.1438
0720	1.10					1.10	43.0	0.1489
0725	1.10					1.10	38.0	0.1535
0730	1.10					1.10	35.0	0.1576
0735	1.10					1.10	34.0	0.1617
0740	1.10					1.10	34.0	0.1658
0745	1.10					1.10	33.0	0.1737
0800	1.10					1.10	22.0	0.1816
0815	1.10					1.10	14.0	0.1866
0830	1.10					1.10	9.8	0.1901
0845	1.10					1.10	6.2	0.1923

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STATION NO. 08048550									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF MARCH 10, 1973									
DATE & TIME	1-DB	GAGE	NUMBER	ACCUM. WEIGHTED PRECIP.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.			
MAP. 10									
0900	1.10			1.10	3.9	0.1937			
0915	1.10			1.10	2.6	0.1947			
0930	1.10			1.10	1.7	0.1953			
0945	1.10			1.10	1.1	0.1957			
1000	1.10			1.10	0.8	0.1959			
1015	1.10			1.10	0.5	0.1961			
1030	1.10			1.10	0.4	0.1963			
1045	1.10			1.10	0.3	0.1964			
1100	1.10			1.10	0.3	0.1965			
1130	1.10			1.10	0.3	0.1989			
2400	1.10			1.10	0.3	0.2011			

HYDROGRAPH and MASS CURVES
for
STORM OF MARCH 10, 1973
at
DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS
Drainage Area 1.08 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 10 ac-ft



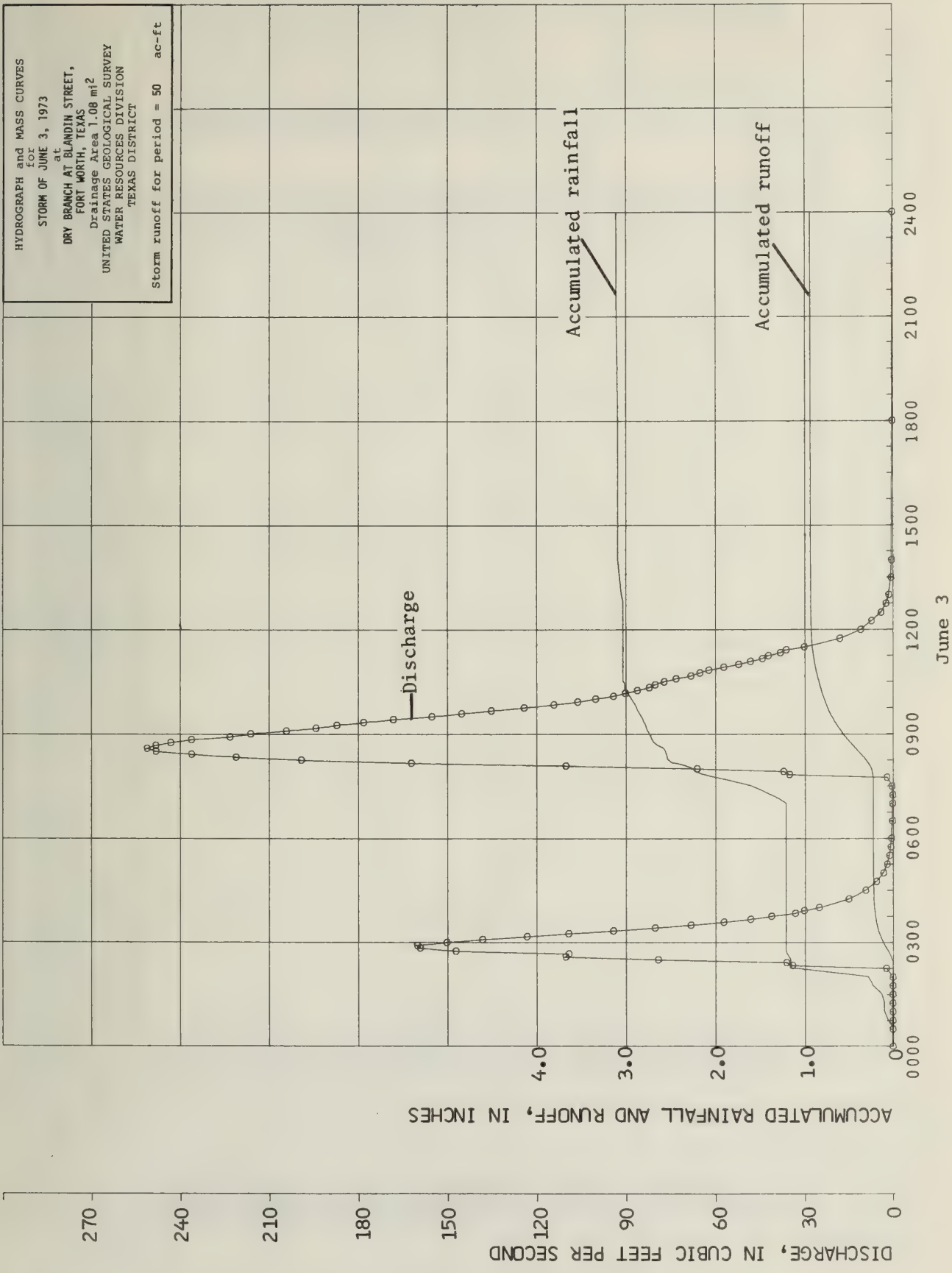
STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 0P048550									
DAY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF JUNE 3, 1973									
DATE & TIME	G A G E				P R E C I P I T A T I O N		D I S C H A R G E		
	1	0	8				I N	F T ³ /S	I N
JUNE 3									
0000	0.0						0.0	0.3	0.0001
0030	0.0						0.0	0.3	0.0002
0045	0.06						0.06	0.3	0.0003
0100	0.10						0.10	0.3	0.0004
0115	0.10						0.10	0.3	0.0005
0130	0.13						0.13	0.3	0.0006
0145	0.23						0.23	0.3	0.0007
0200	0.28						0.28	0.3	0.0008
0215	1.14						1.14	2.5	0.0014
0220	1.14						1.14	34.0	0.0054
0225	1.15						1.15	36.0	0.0097
0230	1.15						1.15	79.0	0.0192
0235	1.17						1.17	110.0	0.0323
0240	1.19						1.19	109.0	0.0454
0245	1.20						1.20	147.0	0.0629
0250	1.20						1.20	159.0	0.0819
0255	1.20						1.20	160.0	0.1011
0300	1.20						1.20	150.0	0.1190
0305	1.20						1.20	138.0	0.1355
0310	1.20						1.20	123.0	0.1502
0315	1.20						1.20	109.0	0.1633
0320	1.20						1.20	94.0	0.1745
0325	1.20						1.20	80.0	0.1841
0330	1.20						1.20	68.0	0.1922
0335	1.20						1.20	57.0	0.1990
0340	1.20						1.20	48.0	0.2047
0345	1.20						1.20	41.0	0.2096
0350	1.20						1.20	33.0	0.2136
0355	1.20						1.20	30.0	0.2172
0400	1.20						1.20	25.0	0.2232
0415	1.20						1.20	15.0	0.2285
0430	1.20						1.20	9.3	0.2319
0445	1.20						1.20	5.7	0.2339
0500	1.20						1.20	3.4	0.2351
0515	1.20						1.20	2.1	0.2359
0530	1.20						1.20	1.3	0.2364
0545	1.20						1.20	0.9	0.2367
0600	1.20						1.20	0.7	0.2370
0630	1.20						1.20	0.4	0.2373

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048550									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.									
STORM OF JUNE 3, 1973									
DATE & TIME	G A G E				N U M B E R		1973 WATER YEAR		
	1-DB						ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.
JUNE 3									
0700	1.20						1.20	0.3	0.2375
0715	1.38						1.38	0.3	0.2376
0730	1.60						1.60	0.5	0.2378
0745	2.02						2.02	2.3	0.2383
0750	2.14						2.14	35.0	0.2425
0755	2.22						2.22	37.0	0.2469
0800	2.25						2.25	66.0	0.2548
0805	2.34						2.34	110.0	0.2680
0810	2.48						2.48	162.0	0.2874
0815	2.52						2.52	199.0	0.3111
0820	2.53						2.53	221.0	0.3376
0825	2.54						2.54	236.0	0.3658
0830	2.55						2.55	248.0	0.3954
0835	2.57						2.57	251.0	0.4255
0840	2.64						2.64	248.0	0.4551
0845	2.68						2.68	243.0	0.4842
0850	2.70						2.70	236.0	0.5124
0855	2.71						2.71	223.0	0.5390
0900	2.73						2.73	216.0	0.5649
0905	2.75						2.75	204.0	0.5893
0910	2.76						2.76	194.0	0.6125
0915	2.77						2.77	187.0	0.6348
0920	2.79						2.79	178.0	0.6561
0925	2.80						2.80	168.0	0.6762
0930	2.82						2.82	155.0	0.6947
0935	2.84						2.84	145.0	0.7121
0940	2.86						2.86	135.0	0.7282
0945	2.87						2.87	124.0	0.7430
0950	2.89						2.89	114.0	0.7567
0955	2.91						2.91	106.0	0.7693
1000	2.93						2.93	100.0	0.7813
1005	2.95						2.95	94.0	0.7925
1010	2.98						2.98	90.0	0.8033
1015	3.00						3.00	86.0	0.8136
1020	3.00						3.00	82.0	0.8234
1025	3.00						3.00	80.0	0.8329
1030	3.02						3.02	77.0	0.8421
1035	3.02						3.02	73.0	0.8509
1040	3.02						3.02	68.0	0.8590

STORM RAINFALL AND RUNOFF RECORD											
STA. NO.	1973 WATER YEAR										
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.											
STORM OF JUNE 3, 1973											
DATE & TIME	1-DB	G	A	G	E	N	U	M	B		
										ACCUM. WEIGHTED PRECIP. IN.	DISCHARGE IN FT ³ /S
JUNE 3											
1045	3.02								3.02	65.0	0.8668
1050	3.02								3.02	62.0	0.8742
1055	3.02								3.02	57.0	0.8810
1100	3.02								3.02	52.0	0.8872
1105	3.02								3.02	48.0	0.8930
1110	3.02								3.02	44.0	0.8982
1115	3.02								3.02	42.0	0.9032
1120	3.02								3.02	38.0	0.9078
1125	3.02								3.02	36.0	0.9121
1130	3.02								3.02	30.0	0.9193
1145	3.02								3.02	18.0	0.9257
1200	3.02								3.02	11.0	0.9297
1215	3.02								3.02	7.3	0.9323
1230	3.02								3.02	4.1	0.9338
1245	3.02								3.02	2.5	0.9347
1300	3.04								3.04	1.5	0.9355
1330	3.06								3.06	0.7	0.9360
1400	3.08								3.08	0.5	0.9377
1800	3.08								3.08	0.4	0.9405
2400	3.11								3.11	0.3	0.9416

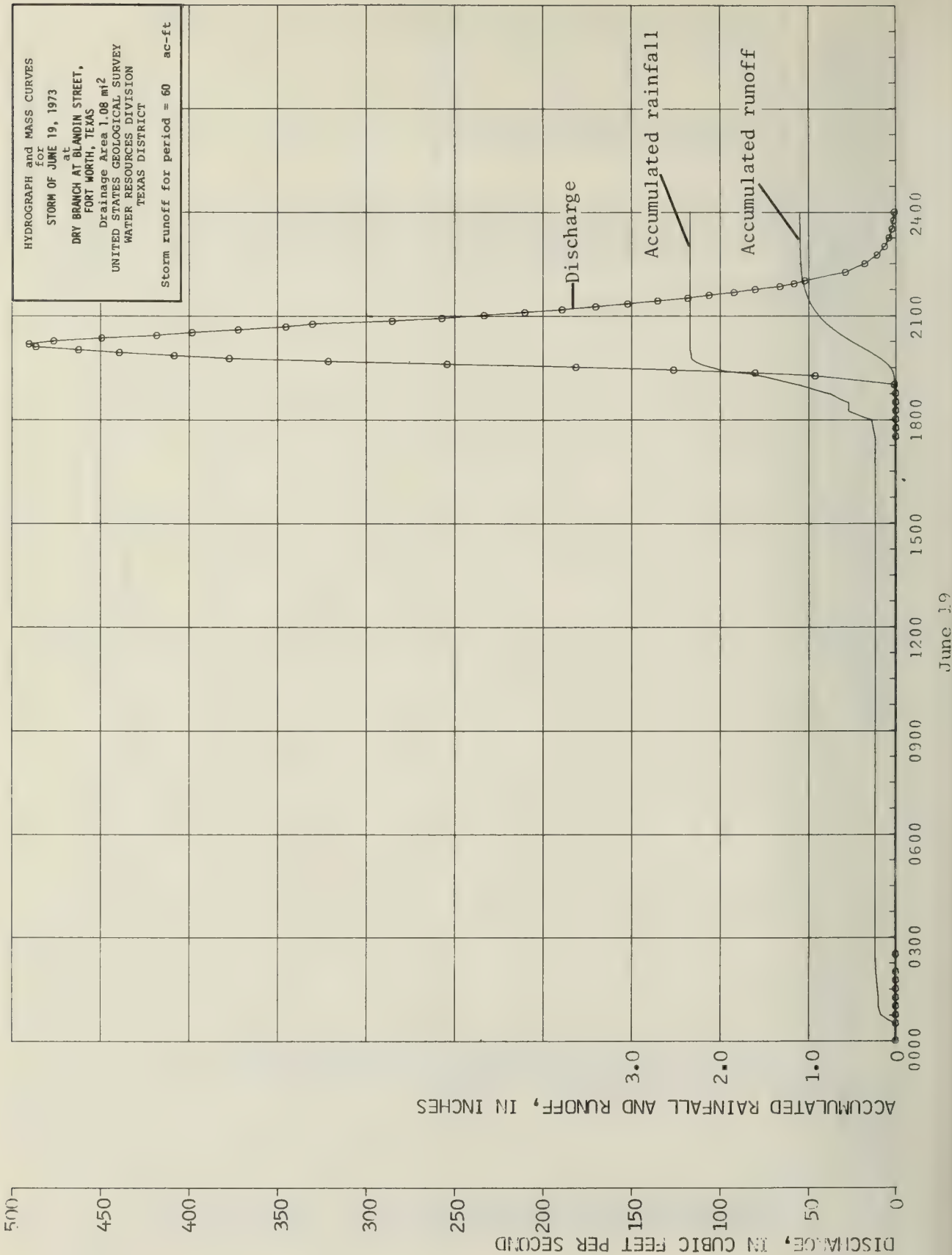
HYDROGRAPH and MASS CURVES
for
STORM OF JUNE 3, 1973
at
DRY BRANCH AT BLANDIN STREET,
FORT WORTH, TEXAS
Drainage Area 1.08 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 50 ac-ft



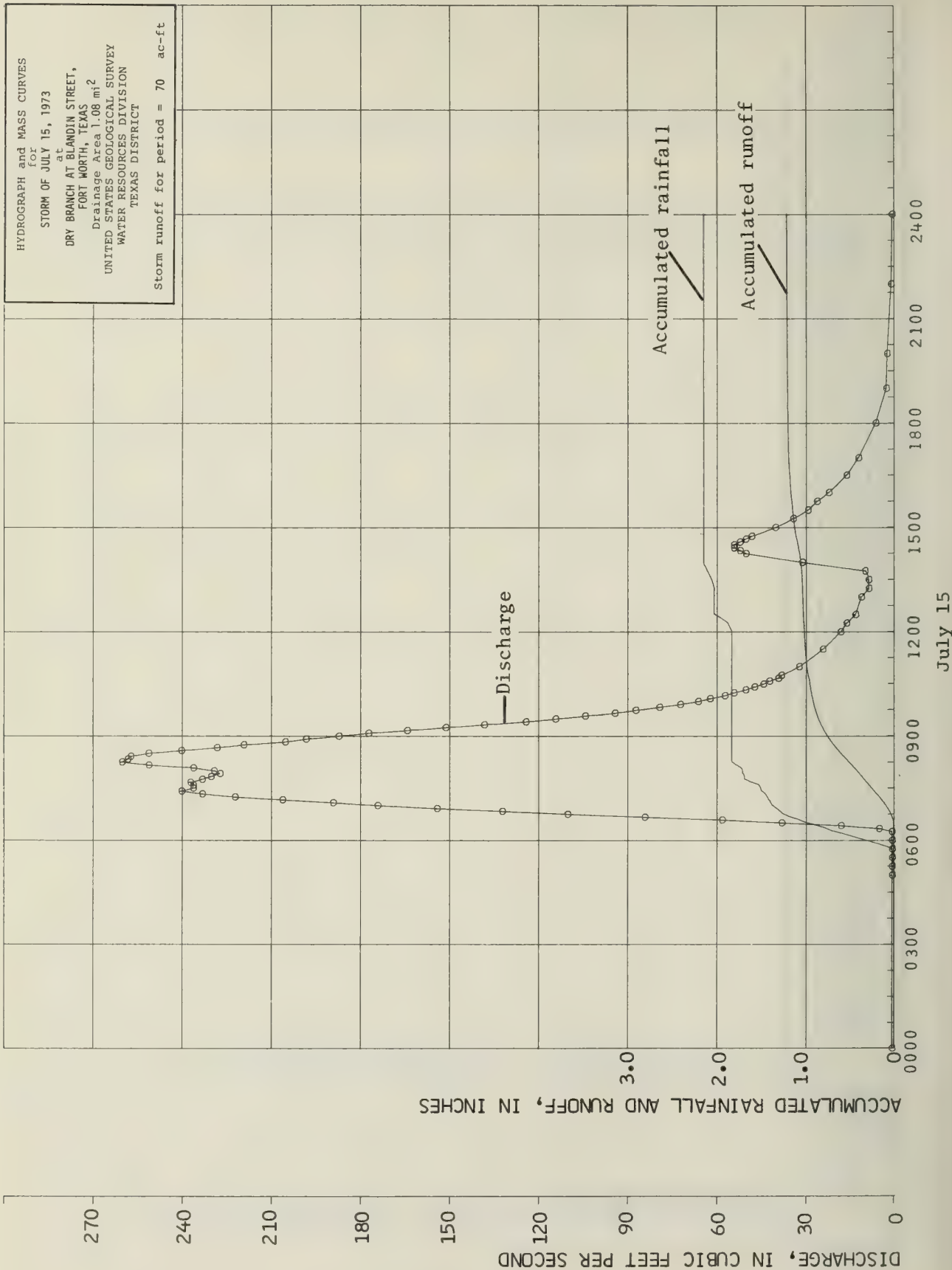
STA. NO. 09048550				STORM RAINFALL AND RUNOFF RECORD				1973 WATER YEAR			
DRY BRANCH AT BLANDIN, FORT WORTH, TEX.				STORM OF JUNE 19, 1973				DISCHARGE			
DATE & TIME				G A G E N U M B E R				IN			
1-DB				PRECIP.				FT ³ /S			
JUNE 19				IN.				IN.			
0000	0.0						0.0		0.4		0.0001
0030	0.0						0.0		0.4		0.0004
0045	0.18						0.18		0.4		0.0005
0100	0.21						0.21		0.4		0.0006
0115	0.21						0.21		0.4		0.0008
0130	0.22						0.22		0.4		0.0009
0145	0.23						0.23		0.4		0.0011
0200	0.24						0.24		0.4		0.0013
0230	0.25						0.25		0.4		0.0057
1730	0.25						0.25		0.4		0.0101
1745	0.27						0.27		0.4		0.0103
1800	0.29						0.29		0.4		0.0104
1815	0.55						0.55		0.4		0.0105
1830	0.55						0.55		0.4		0.0107
1845	0.76						0.76		0.4		0.0108
1900	1.10						1.10		1.1		0.0112
1915	1.50						1.50		46.0		0.0222
1920	1.65						1.65		80.0		0.0318
1925	1.96						1.96		126.0		0.0469
1930	2.08						2.08		181.0		0.0685
1935	2.20						2.20		254.0		0.0989
1940	2.27						2.27		321.0		0.1373
1945	2.32						2.32		377.0		0.1823
1950	2.33						2.33		408.0		0.2311
1955	2.33						2.33		439.0		0.2836
2000	2.34						2.34		462.0		0.3388
2005	2.34						2.34		486.0		0.3969
2010	2.34						2.34		490.0		0.4555
2015	2.34						2.34		476.0		0.5125
2020	2.34						2.34		449.0		0.5661
2025	2.34						2.34		418.0		0.6161
2030	2.34						2.34		398.0		0.6637
2035	2.34						2.34		372.0		0.7082
2040	2.34						2.34		345.0		0.7494
2045	2.34						2.34		330.0		0.7889
2050	2.34						2.34		285.0		0.8230
2055	2.34						2.34		257.0		0.8537
2100	2.34						2.34		213.0		0.8816
2105	2.34						2.34		210.0		0.9067

STA. NO.		STORM RAINFALL AND RUNOFF RECORD						1973 WATER YEAR		
		STORM OF JUNE 19, 1973								
DATE & TIME		G A G E N U M B E R						DISCHARGE IN FT ³ /S		
		PRECIP. IN.						ACCUM. WEIGHTED		
		IN.						RUNOFF IN.		
JUNE 19										
2110	2.34							2.34	189.0	0.9293
2115	2.34							2.34	170.0	0.9496
2120	2.34							2.34	152.0	0.9678
2125	2.34							2.34	135.0	0.9839
2130	2.34							2.34	118.0	0.9980
2135	2.34							2.34	106.0	1.0107
2140	2.34							2.34	92.0	1.0217
2145	2.34							2.34	80.0	1.0313
2150	2.34							2.34	66.0	1.0391
2155	2.34							2.34	58.0	1.0461
2200	2.34							2.34	52.0	1.0585
2215	2.34							2.34	29.0	1.0689
2230	2.34							2.34	18.0	1.0754
2245	2.34							2.34	11.0	1.0793
2300	2.34							2.34	6.8	1.0818
2315	2.34							2.34	4.3	1.0833
2330	2.34							2.34	2.5	1.0842
2345	2.34							2.34	1.6	1.0848
2400	2.34							2.34	1.0	1.0849



STA. NO. 08048550		STORM RAINFALL AND RUNOFF RECORD									
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.		1973 WATER YEAR									
DATE & TIME		G A G E		N U M B E R		ACCUM. WEIGHTED PRECIP.		DISCHARGE IN		ACCUM. RUNOFF IN.	
JULY 15		1-08				IN.		FT ³ /S		IN.	
0000		0.0					0.0		0.6		0.0022
0500		0.0					0.0		0.6		0.0044
0515		0.0					0.0		0.6		0.0046
0530		0.02					0.02		0.6		0.0048
0545		0.02					0.02		0.6		0.0051
0600		0.35					0.35		0.6		0.0053
0615		0.70					0.70		0.8		0.0055
0620		0.77					0.77		5.1		0.0061
0625		0.88					0.88		18.0		0.0082
0630		1.00					1.00		38.0		0.0128
0635		1.08					1.08		58.0		0.0197
0640		1.18					1.18		84.0		0.0297
0645		1.25					1.25		110.0		0.0429
0650		1.29					1.29		132.0		0.0587
0655		1.33					1.33		154.0		0.0771
0700		1.37					1.37		174.0		0.0979
0705		1.39					1.39		189.0		0.1205
0710		1.41					1.41		206.0		0.1451
0715		1.43					1.43		222.0		0.1717
0720		1.45					1.45		233.0		0.1995
0725		1.49					1.49		240.0		0.2282
0730		1.50					1.50		236.0		0.2564
0735		1.52					1.52		236.0		0.2847
0740		1.61					1.61		237.0		0.3130
0745		1.68					1.68		233.0		0.3409
0750		1.68					1.68		230.0		0.3684
0755		1.70					1.70		227.0		0.3955
0800		1.70					1.70		229.0		0.4229
0805		1.72					1.72		236.0		0.4511
0810		1.78					1.78		251.0		0.4811
0815		1.82					1.82		260.0		0.5122
0820		1.82					1.82		258.0		0.5430
0825		1.82					1.82		257.0		0.5738
0830		1.82					1.82		251.0		0.6038
0835		1.82					1.82		240.0		0.6325
0840		1.82					1.82		228.0		0.6597
0845		1.82					1.82		219.0		0.6859
0850		1.82					1.82		205.0		0.7104
0855		1.82					1.82		198.0		0.7341

STA. NO. 08048550				STORM RAINFALL AND RUNOFF RECORD				1973 WATER YEAR			
DRY BRANCH AT BLANDIN STREET, FORT WORTH, TEX.				STORM OF JULY 15, 1973				DISCHARGE			
DATE & TIME				G A G E N U M B E R				PRECIP. IN.			
1-DB				1				FT ³ /S			
JULY 15											
0900	1.82							1.82	187.0		0.7565
0905	1.82							1.82	177.0		0.7776
0910	1.82							1.82	164.0		0.7972
0915	1.82							1.82	151.0		0.8153
0920	1.82							1.82	138.0		0.8318
0925	1.82							1.82	124.0		0.8466
0930	1.82							1.82	114.0		0.8603
0935	1.82							1.82	104.0		0.8727
0940	1.82							1.82	94.0		0.8839
0945	1.82							1.82	87.0		0.8943
0950	1.82							1.82	79.0		0.9038
0955	1.82							1.82	72.0		0.9124
1000	1.82							1.82	66.0		0.9203
1005	1.82							1.82	62.0		0.9277
1010	1.82							1.82	57.0		0.9345
1015	1.82							1.82	54.0		0.9410
1020	1.82							1.82	50.0		0.9469
1025	1.82							1.82	47.0		0.9526
1030	1.82							1.82	44.0		0.9578
1035	1.82							1.82	42.0		0.9628
1040	1.82							1.82	39.0		0.9675
1045	1.82							1.82	38.0		0.9766
1100	1.82							1.82	32.0		0.9938
1130	1.82							1.82	24.0		1.0110
1200	1.82							1.82	18.0		1.0207
1215	1.87							1.87	16.0		1.0265
1230	2.02							2.02	13.0		1.0334
1300	2.02							2.02	11.0		1.0394
1315	2.02							2.02	8.5		1.0424
1330	2.05							2.05	8.5		1.0455
1345	2.10							2.10	9.8		1.0490
1400	2.15							2.15	31.0		1.0601
1415	2.15							2.15	50.0		1.0721
1420	2.15							2.15	52.0		1.0783
1425	2.15							2.15	54.0		1.0847
1430	2.15							2.15	54.0		1.0912
1435	2.15							2.15	52.0		1.0974
1440	2.15							2.15	50.0		1.1034
1445	2.15							2.15	48.0		1.1149

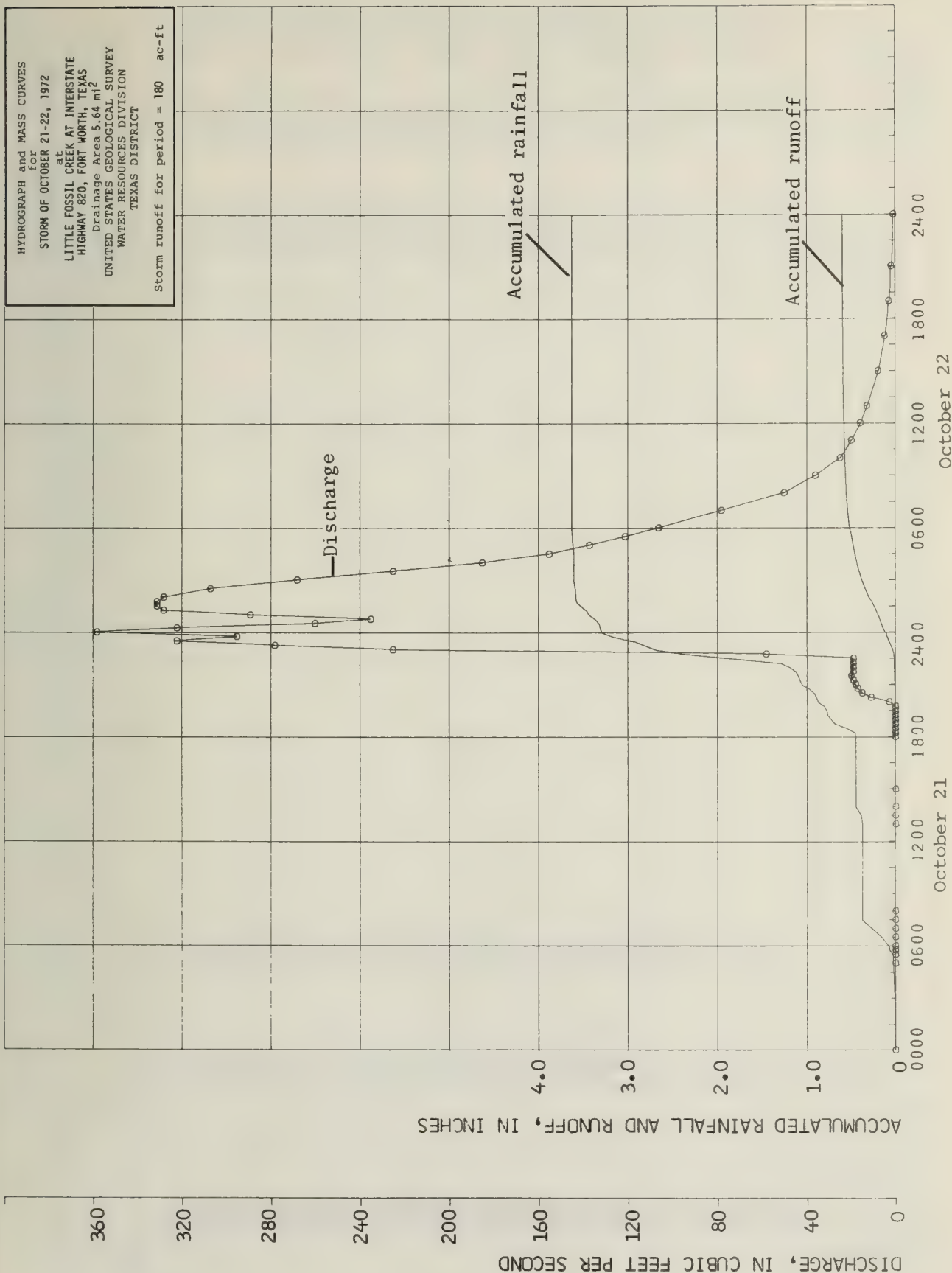


STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08048820									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX									
OCT. 21-22, 1972									
DATE & TIME	1-LF	2-LF	G A G E	N U M B E R	PRECIP.	IN.	FT ³ /S	DISCHARGE	ACCUM. WEIGHTED PRECIP.
OCT. 21									
0000	0.0	0.0				0.0		0.1	0.0001
0500	0.04	0.03				0.04		0.1	0.0001
0530	0.04	0.03				0.04		0.1	0.0002
0545	0.06	0.11				0.07		0.1	0.0002
0600	0.07	0.13				0.08		0.1	0.0002
0630	0.14	0.24				0.16		0.1	0.0002
0700	0.24	0.37				0.27		0.1	0.0002
0730	0.36	0.46				0.38		0.1	0.0002
0800	0.36	0.46				0.38		0.1	0.0003
1300	0.36	0.46				0.38		0.1	0.0004
1330	0.37	0.47				0.39		0.1	0.0004
1400	0.44	0.50				0.45		0.1	0.0004
1500	0.44	0.51				0.46		0.1	0.0005
1800	0.44	0.51				0.46		0.1	0.0005
1815	0.44	0.53				0.46		0.1	0.0005
1830	0.54	0.62				0.56		0.1	0.0005
1845	0.69	0.67				0.69		0.1	0.0005
1900	0.73	0.72				0.73		0.1	0.0005
1915	0.78	0.73				0.77		0.1	0.0005
1930	0.79	0.74				0.78		0.1	0.0005
1945	0.82	0.75				0.80		0.1	0.0005
2000	0.89	0.82				0.87		3.0	0.0008
2015	0.91	0.83				0.89		11.0	0.0015
2030	0.92	0.90				0.92		15.0	0.0025
2045	0.94	1.08				0.97		17.0	0.0037
2100	1.04	1.10				1.05		18.0	0.0049
2115	1.06	1.14				1.08		19.0	0.0062
2130	1.08	1.15				1.10		20.0	0.0076
2145	1.11	1.16				1.12		19.0	0.0089
2200	1.14	1.34				1.19		19.0	0.0102
2215	1.22	1.54				1.30		19.0	0.0115
2230	1.75	1.99				1.81		19.0	0.0128
2245	2.37	2.14				2.31		58.0	0.0168
2300	2.66	2.75				2.68		225.0	0.0323
2315	2.79	2.86				2.81		278.0	0.0514
2330	2.85	3.16				2.92		322.0	0.0735
2345	3.13	3.25				3.16		295.0	0.0938
2400	3.28	3.31				3.29		358.0	0.1060
OCT. 22									
0000	3.28	3.31				3.29		358.0	0.1183

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0R048820									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX									
OCT. 21-22, 1972									
DATE & TIME	G A G E			N U M B E R			1973 WATER YEAR		
	1-LF	2-LF					DISCHARGE IN	ACCUM. WEIGHTED PRECIP. IN.	ACCUM. RUNOFF IN.
OCT. 22									
0015	3.29	3.37					322.0	3.31	0.1405
0030	3.30	3.38					260.0	3.32	0.1583
0045	3.34	3.42					235.0	3.36	0.1745
0100	3.41	3.48					289.0	3.43	0.1943
0115	3.44	3.52					328.0	3.46	0.2168
0130	3.51	3.54					331.0	3.52	0.2396
0145	3.57	3.57					331.0	3.57	0.2623
0200	3.54	3.59					328.0	3.58	0.2961
0230	3.58	3.61					307.0	3.59	0.3383
0300	3.60	3.62					268.0	3.60	0.3751
0330	3.60	3.62					225.0	3.60	0.4060
0400	3.60	3.62					185.0	3.60	0.4314
0430	3.60	3.62					155.0	3.60	0.4527
0500	3.61	3.62					137.0	3.61	0.4715
0530	3.62	3.62					121.0	3.62	0.4882
0600	3.63	3.62					106.0	3.63	0.5100
0700	3.63	3.62					78.0	3.63	0.5314
0800	3.63	3.62					50.0	3.63	0.5452
0900	3.63	3.62					36.0	3.63	0.5551
1000	3.63	3.62					25.0	3.63	0.5619
1100	3.63	3.62					20.0	3.63	0.5674
1200	3.63	3.62					16.0	3.63	0.5718
1300	3.63	3.62					13.0	3.63	0.5772
1500	3.63	3.62					8.0	3.63	0.5816
1700	3.63	3.62					5.0	3.63	0.5843
1900	3.63	3.62					3.2	3.63	0.5861
2100	3.63	3.62					2.1	3.63	0.5875
2400	3.63	3.62					1.0	3.63	0.5879

HYDROGRAPH and MASS CURVES
for
STORM OF OCTOBER 21-22, 1972
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 180 ac-ft

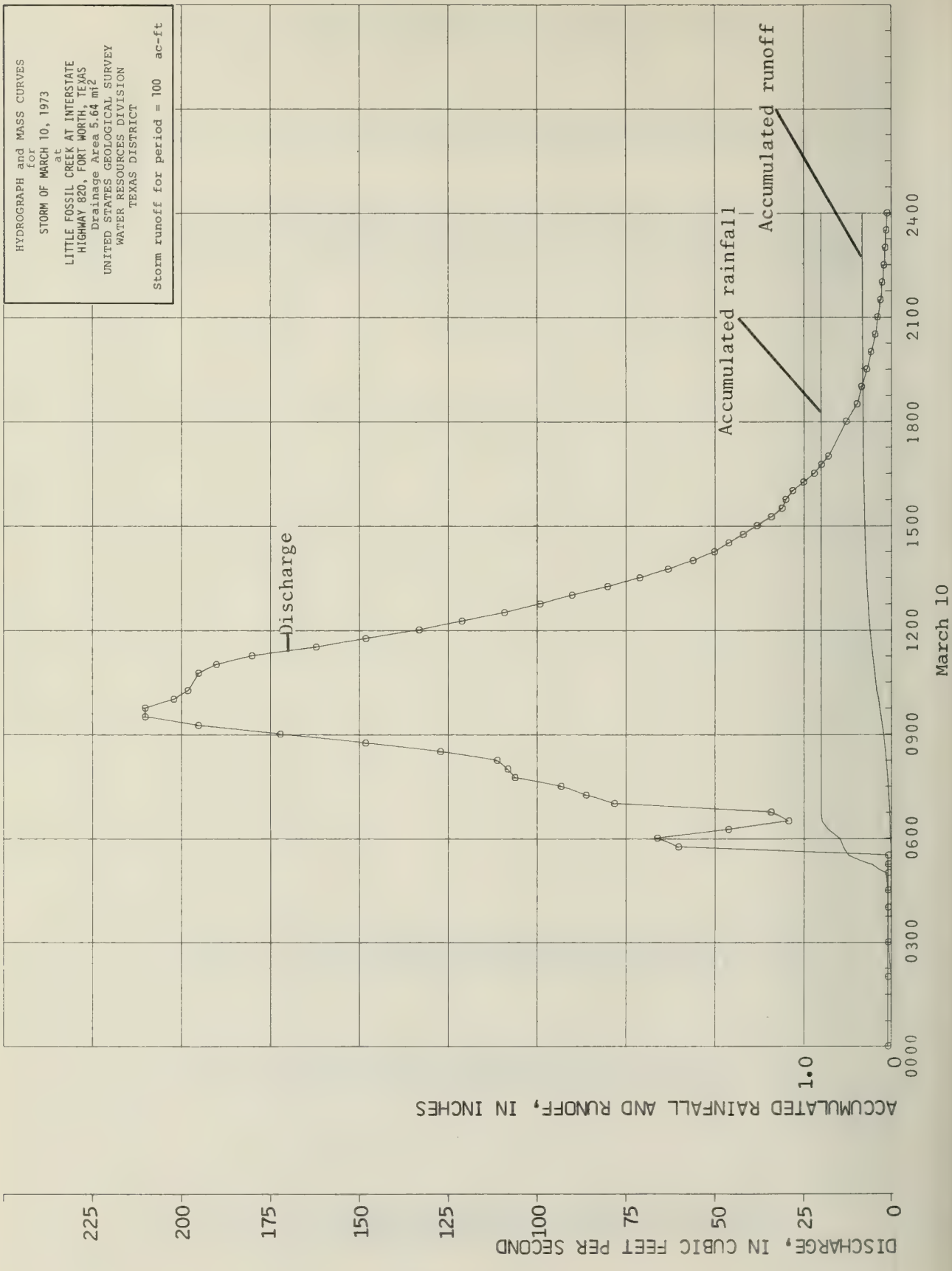


STORM RAINFALL AND RUNOFF RECORD										1973 WATER YEAR	
STA. NO.	LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX									DISCHARGE	ACCUM.
DATE & TIME	STORM OF MARCH 10, 1973									IN	RUNOFF
	1-LF	2-LF	G A G E N U M B E R						PRECIP.	FT ³ /S	IN.
MAR. 10											
0000	0.0	0.0							0.0	1.0	0.0003
0200	0.02	0.0							0.02	1.0	0.0007
0300	0.06	0.02							0.05	1.0	0.0010
0400	0.06	0.03							0.05	1.0	0.0012
0430	0.06	0.03							0.05	1.0	0.0013
0500	0.07	0.07							0.07	1.0	0.0014
0515	0.16	0.45							0.23	1.0	0.0015
0530	0.49	0.49							0.49	1.0	0.0015
0545	0.55	0.57							0.55	60.0	0.0057
0600	0.59	0.60							0.59	66.0	0.0102
0615	0.70	0.78							0.72	46.0	0.0134
0630	0.78	0.84							0.79	29.0	0.0154
0645	0.78	0.89							0.81	34.0	0.0177
0700	0.78	0.89							0.81	78.0	0.0230
0715	0.78	0.89							0.81	86.0	0.0290
0730	0.78	0.89							0.81	93.0	0.0353
0745	0.78	0.89							0.81	106.0	0.0426
0800	0.78	0.89							0.81	108.0	0.0500
0815	0.78	0.89							0.81	111.0	0.0577
0830	0.78	0.89							0.81	127.0	0.0664
0845	0.78	0.89							0.81	148.0	0.0766
0900	0.78	0.89							0.81	172.0	0.0884
0915	0.78	0.89							0.81	195.0	0.1018
0930	0.78	0.89							0.81	210.0	0.1162
0945	0.78	0.89							0.81	210.0	0.1306
1000	0.78	0.89							0.81	202.0	0.1445
1015	0.78	0.89							0.81	198.0	0.1649
1045	0.78	0.89							0.81	195.0	0.1850
1100	0.78	0.89							0.81	190.0	0.1950
1115	0.78	0.89							0.81	180.0	0.2104
1130	0.78	0.89							0.81	162.0	0.2215
1145	0.78	0.89							0.81	148.0	0.2317
1200	0.78	0.89							0.81	133.0	0.2408
1215	0.78	0.89							0.81	121.0	0.2491
1230	0.78	0.89							0.81	109.0	0.2566
1245	0.78	0.89							0.81	99.0	0.2634
1300	0.78	0.89							0.81	90.0	0.2696
1315	0.78	0.89							0.81	80.0	0.2751
1330	0.78	0.89							0.81	71.0	0.2800

STORM RAINFALL AND RUNOFF RECORD									
1973 WATER YEAR									
STA. NO. 08048820									
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX STORM OF MARCH 10, 1973									
DATE & TIME	G A G E				N U M B E R	P R E C I P .		D I S C H A R G E	A C C U M .
	1-LF	2-LF				IN.	IN.		
MAR. 10									
1345	0.78	0.89				0.81	63.0	0.2843	0.2843
1400	0.78	0.89				0.81	56.0	0.2881	0.2881
1415	0.78	0.89				0.81	50.0	0.2916	0.2916
1430	0.78	0.89				0.81	46.0	0.2947	0.2947
1445	0.78	0.89				0.81	42.0	0.2976	0.2976
1500	0.78	0.89				0.81	38.0	0.3002	0.3002
1515	0.78	0.89				0.81	34.0	0.3026	0.3026
1530	0.78	0.89				0.81	31.0	0.3047	0.3047
1545	0.78	0.89				0.81	30.0	0.3068	0.3068
1600	0.78	0.89				0.81	28.0	0.3087	0.3087
1615	0.78	0.89				0.81	25.0	0.3104	0.3104
1630	0.78	0.89				0.81	22.0	0.3119	0.3119
1645	0.78	0.89				0.81	20.0	0.3133	0.3133
1700	0.78	0.89				0.81	18.0	0.3164	0.3164
1800	0.78	0.89				0.81	13.0	0.3191	0.3191
1830	0.78	0.89				0.81	10.0	0.3204	0.3204
1900	0.78	0.89				0.81	8.7	0.3216	0.3216
1930	0.78	0.89				0.81	7.2	0.3226	0.3226
2000	0.78	0.89				0.81	6.0	0.3234	0.3234
2030	0.78	0.89				0.81	4.8	0.3241	0.3241
2100	0.78	0.89				0.81	4.1	0.3247	0.3247
2130	0.78	0.89				0.81	3.3	0.3251	0.3251
2200	0.78	0.89				0.81	2.8	0.3255	0.3255
2230	0.78	0.89				0.81	2.3	0.3258	0.3258
2300	0.78	0.89				0.81	1.9	0.3261	0.3261
2330	0.78	0.89				0.81	1.6	0.3263	0.3263
2400	0.78	0.89				0.81	1.3	0.3264	0.3264

HYDROGRAPH and MASS CURVES
for
STORM OF MARCH 10, 1973
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 100 ac-ft

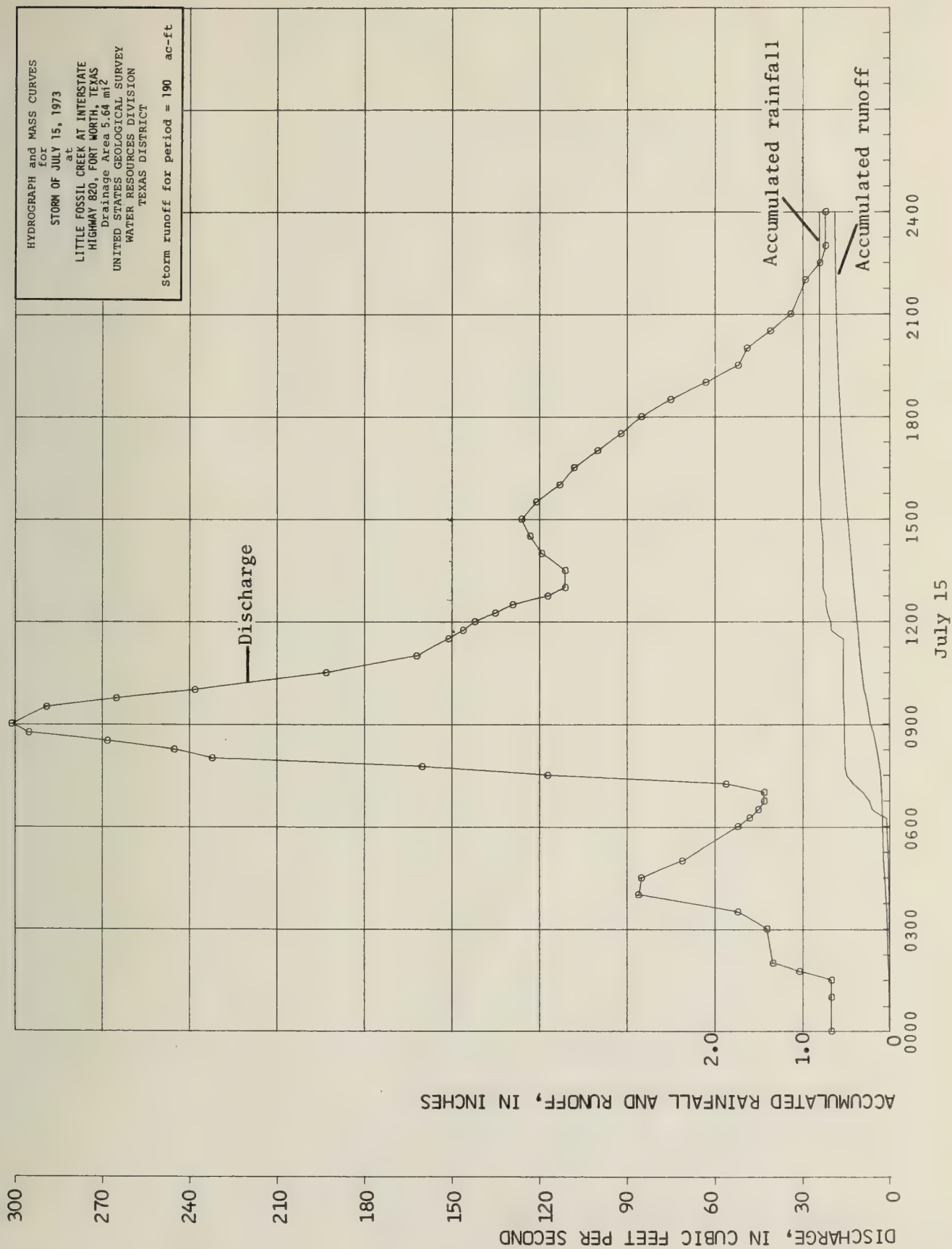


STORM RAINFALL AND RUNOFF RECORD												1973 WATER YEAR	
STA. NO. 08048B20													
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX													
JULY 15, 1973													
DATE & TIME	G A G E			N U M B E R	A C C U M .		D I S C H A R G E	I N	F T ³ /S	I N .	R U N O F F	A C C U M .	
	1-LF	2-LF			P R E C I P .	I N							
JULY 15													
0000	0.0	0.0							0.0	20.0		0.0027	
0100	0.0	0.01							0.00	20.0		0.0069	
0130	0.0	0.02							0.00	20.0		0.0089	
0145	0.0	0.02							0.00	31.0		0.0111	
0200	0.01	0.02							0.01	40.0		0.0179	
0300	0.02	0.02							0.02	42.0		0.0266	
0330	0.02	0.02							0.02	52.0		0.0337	
0400	0.02	0.02							0.02	86.0		0.0455	
0430	0.03	0.02							0.03	85.0		0.0572	
0500	0.03	0.03							0.03	71.0		0.0718	
0600	0.05	0.04							0.05	52.0		0.0808	
0615	0.05	0.05							0.05	48.0		0.0841	
0630	0.20	0.24							0.21	45.0		0.0872	
0645	0.20	0.38							0.24	43.0		0.0901	
0700	0.27	0.46							0.32	43.0		0.0931	
0715	0.30	0.81							0.42	56.0		0.0969	
0730	0.38	0.89							0.50	117.0		0.1050	
0745	0.40	0.91							0.52	160.0		0.1159	
0800	0.40	0.91							0.52	232.0		0.1319	
0815	0.40	0.92							0.52	245.0		0.1487	
0830	0.40	0.94							0.53	268.0		0.1671	
0845	0.40	0.94							0.53	295.0		0.1874	
0900	0.40	0.94							0.53	301.0		0.2184	
0930	0.40	0.95							0.53	289.0		0.2482	
0945	0.41	0.95							0.54	265.0		0.2664	
1000	0.41	0.96							0.54	238.0		0.2909	
1030	0.41	0.96							0.54	193.0		0.3174	
1100	0.41	0.96							0.54	162.0		0.3397	
1130	0.41	0.96							0.54	151.0		0.3552	
1145	0.59	0.96							0.68	146.0		0.3652	
1200	0.60	0.96							0.69	142.0		0.3750	
1215	0.63	1.00							0.72	135.0		0.3843	
1230	0.63	1.09							0.74	129.0		0.3931	
1245	0.63	1.09							0.74	117.0		0.4012	
1300	0.65	1.16							0.77	111.0		0.4126	
1330	0.65	1.16							0.77	111.0		0.4279	
1400	0.65	1.17							0.77	119.0		0.4442	
1430	0.65	1.18							0.78	123.0		0.4611	
1500	0.68	1.18							0.80	126.0		0.4784	

STORM RAINFALL AND RUNOFF RECORD												1973 WATER YEAR	
STA. NO. 08048820													
LITTLE FOSSIL CREEK AT INTERSTATE HWY 820, FT WORTH, TEX													
JULY 15, 1973													
DATE & TIME	G A G E		N U M B E R	P R E C I P .		W E I G H T E D	D I S C H A R G E		A C C U M .	R U N O F F			
	1-LF	2-LF		I N .	I N .		I N	FT ³ /S		I N	I N .		
JULY 15													
1530	0.68	1.18						121.0	0.80			0.4950	
1600	0.70	1.18						113.0	0.82			0.5106	
1630	0.70	1.18						108.0	0.82			0.5254	
1700	0.70	1.18						100.0	0.82			0.5391	
1730	0.70	1.18						92.0	0.82			0.5518	
1800	0.70	1.18						85.0	0.82			0.5634	
1830	0.70	1.18						75.0	0.82			0.5737	
1900	0.70	1.18						63.0	0.82			0.5824	
1930	0.70	1.18						52.0	0.82			0.5895	
2000	0.70	1.18						49.0	0.82			0.5963	
2030	0.70	1.18						41.0	0.82			0.6019	
2100	0.70	1.18						34.0	0.82			0.6089	
2200	0.70	1.18						29.0	0.82			0.6149	
2230	0.70	1.18						24.0	0.82			0.6182	
2300	0.70	1.18						22.0	0.82			0.6227	
2400	0.70	1.18						22.0	0.82			0.6257	

HYDROGRAPH and MASS CURVES
for
STORM OF JULY 15, 1973
at
LITTLE FOSSIL CREEK AT INTERSTATE
HIGHWAY 820, FORT WORTH, TEXAS
Drainage Area 5.64 mi²
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
TEXAS DISTRICT

Storm runoff for period = 190 ac-ft





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